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(21) International Application Number: PCT/US99/24206 (22) International Filing Date: 15 October 1999 (15.10.99) (30) Priority Data: 60/104,436 15 October 1998 (15.10.98) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/104,436 (CIP) Filed on 15 October 1998 (15.10.98) (71) Applicant (for all designated States except US): GENETICS INSTITUTE, INC. [US/US]; 87 Cambridge Park Drive, Cambridge, MA 02140 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): JACOBS, Kenneth [US/US]; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M. [GB/US]; 56 Howard Street, Reading, MA 01867 (US). LaVALLIE, Edward, R. [US/US]; 113 Ann Lee Road, Harvard, MA 01451 (US). COLLINS-RACIE, Lisa, A. [US/US]; 124 School Street, Acton, MA 01720 (US). EVANS, Cheryl [GB/US]; 18801 Bent Willow Circle, Germantown, MD 20874 (US).		(74) Agent: SPRUNGER, Suzanne, A.; American Home Products Corporation, Patent & Trademark Department - 2B, One Campus Drive, Parsippany, NJ 07054 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)		
(57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated
5 polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

25 In other embodiments, the present invention provides an isolated
 polynucleotide consisting of a nucleotide sequence selected from the group consisting
 of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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5 NO:2301, SEQ ID NO:2302, SEQ ID NO:2303, SEQ ID NO:2304, SEQ ID
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NO:2481, SEQ ID NO:2482, SEQ ID NO:2483, SEQ ID NO:2484, SEQ ID
NO:2485, SEQ ID NO:2486, SEQ ID NO:2487, SEQ ID NO:2488, SEQ ID
NO:2489, SEQ ID NO:2490, SEQ ID NO:2491, SEQ ID NO:2492, SEQ ID
NO:2493, SEQ ID NO:2494, SEQ ID NO:2495, SEQ ID NO:2496, SEQ ID
20 NO:2497, SEQ ID NO:2498, SEQ ID NO:2499, and SEQ ID NO:2500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides. In certain preferred embodiments, the polynucleotide is operably linked to an expression control sequence. The invention also provides a host cell,
25 including bacterial, yeast, insect and mammalian cells, transformed with such polynucleotide compositions. Also provided by the present invention are organisms that have enhanced, reduced, or modified expression of the gene(s) corresponding to the polynucleotide sequences disclosed herein.

Processes are also provided for producing a protein, which comprise:

- 30 (a) growing a culture of the host cell transformed with such polynucleotide compositions in a suitable culture medium; and
(b) purifying the protein from the culture.

The protein produced according to such methods is also provided by the present invention.

Protein compositions of the present invention may further comprise a pharmaceutically acceptable carrier. Compositions comprising an antibody which specifically reacts with such protein are also provided by the present invention.

Methods are also provided for preventing, treating or ameliorating a medical condition which comprises administering to a mammalian subject a therapeutically effective amount of a composition comprising a protein of the present invention, and/or a polynucleotide of the present invention, and a pharmaceutically acceptable carrier.

10

DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., AA239, AA249, etc.).

	1	AA239	18	AC365	35	AE327	52	AE479
20	2	AA249	19	AC384	36	AE358	53	AE502
	3	AA25	20	AC407	37	AE38	54	AE503
	4	AA292	21	AD599	38	AE382	55	AE520
	5	AA306	22	AD647	39	AE396	56	AE545
	6	AA336	23	AD655	40	AE399	57	AE549
25	7	AA34	24	AD803	41	AE401	58	AE57
	8	AA342	25	AE103	42	AE402	59	AE570
	9	AA356	26	AE210	43	AE403	60	AE595
	10	AA360	27	AE238	44	AE417	61	AE601
	11	AA38	28	AE252	45	AE424	62	AE606
30	12	AA43	29	AE289	46	AE435	63	AE610
	13	AA50	30	AE290	47	AE440	64	AE64
	14	AA64	31	AE302	48	AE443	65	AE648
	15	AC15	32	AE303	49	AE445	66	AE660
	16	AC334	33	AE314	50	AE468	67	AE674
35	17	AC349	34	AE319	51	AE471	68	AE693

	69	AE696	106	AH556	143	AM198	180	AT205
	70	AE90	107	AH601	144	AM260	181	AT211
	71	AF18	108	AH604	145	AM262	182	AT212
	72	AF217	109	AH612	146	AM292	183	AT215
5	73	AF221	110	AH622	147	AM338	184	AT216
	74	AF271	111	AH63	148	AM340	185	AT368
	75	AF276	112	AH652	149	AM341	186	AU112
	76	AF28	113	AH666	150	AM483	187	AU117
	77	AF42	114	AH8	151	AM57	188	AV10
10	78	AF49	115	AJ102	152	AM574	189	AV110
	79	AF51	116	AJ118	153	AM58	190	AV117
	80	AF52	117	AJ149	154	AM690	191	AV129
	81	AF54	118	AJ151	155	AM691	192	AV141
	82	AF85	119	AJ75	156	AM699	193	AV152
15	83	AG107	120	AJ88	157	AM748	194	AV156
	84	AG121	121	AK296	158	AM764	195	AV179
	85	AG175	122	AK384	159	AM776	196	AV189
	86	AG237	123	AK421	160	AM830	197	AV22
	87	AG99	124	AK489	161	AM87	198	AV227
20	88	AH106	125	AK492	162	AM880	199	AV30
	89	AH123	126	AK533	163	AM900	200	AV6
	90	AH144	127	AK554	164	AM905	201	AV66
	91	AH191	128	AK595	165	AM916	202	AV7
	92	AH196	129	AK600	166	AM946	203	AV92
25	93	AH230	130	AK672	167	AM964	204	AW242
	94	AH239	131	AK698	168	AN89	205	AX2
	95	AH356	132	AK759	169	AO90	206	AY123
	96	AH372	133	AM1019	170	AP132	207	AY177
	97	AH38	134	AM1044	171	AP240	208	AY225
30	98	AH383	135	AM1057	172	AP244	209	AY254
	99	AH389	136	AM1085	173	AQ51	210	AY322
	100	AH406	137	AM1111	174	AR260	211	AY344
	101	AH418	138	AM1122	175	AS286	212	AY412
	102	AH51	139	AM1131	176	AS32	213	AY434
35	103	AH547	140	AM157	177	AS34	214	AY448
	104	AH55	141	AM184	178	AS98	215	AY97
	105	AH555	142	AM185	179	AT106	216	AZ278

	217	BB8	254	BD368	291	BV20	328	D137
	218	BB9	255	BD451	292	BV223	329	D147
	219	BC128	256	BD453	293	BZ398	330	D24
	220	BC130	257	BD471	294	BZ595	331	DD23
5	221	BC132	258	BD54	295	C282	332	DD239
	222	BC170	259	BD81	296	C545	333	DD254
	223	BC226	260	BG46	297	C662	334	DD344
	224	BC246	261	BG52	298	CA1	335	DD523
	225	BC253	262	BG54	299	CA100	336	DD70
10	226	BC262	263	BG65	300	CA104	337	DD77
	227	BC272	264	BG66	301	CA105	338	DG288
	228	BC294	265	BG68	302	CA106	339	DG319
	229	BC295	266	BG77	303	CA114	340	DH1147
	230	BC300	267	BG78	304	CA119	341	DI396
15	231	BC303	268	BH126	305	CA127	342	DL486
	232	BC306	269	BH212	306	CA133	343	DO441
	233	BC308	270	BH349	307	CA15	344	DP101
	234	BC317	271	BI101	308	CA157	345	DP102
	235	BC351	272	BJ35	309	CA165	346	DP105
20	236	BC370	273	BJ65	310	CA173	347	DP106
	237	BC390	274	BL150	311	CA176	348	DP109
	238	BC409	275	BN13	312	CA180	349	DP111
	239	BC410	276	BN185	313	CA183	350	DP120
	240	BC420	277	BN203	314	CA3	351	DP122
25	241	BC430	278	BN34	315	CA41	352	DP127
	242	BC456	279	BN381	316	CA44	353	DP131
	243	BC457	280	BN73	317	CA51	354	DP135
	244	BC467	281	BO13	318	CA57	355	DP140
	245	BC471	282	BO342	319	CA79	356	DP147
30	246	BC473	283	BO356	320	CA94	357	DP175
	247	BC72	284	BO41	321	CC53	358	DP180
	248	BC75	285	BO541	322	CJ210	359	DP97
	249	BD112	286	BP116	323	CJ384	360	DU499
	250	BD249	287	BP578	324	CL164	361	DY39
35	251	BD283	288	BP582	325	CR1187	362	DY691
	252	BD306	289	BP822	326	CR552	363	DZ23
	253	BD353	290	BT138	327	D130	364	EF109

	365	EK610	402	GL404	439	HS11	476	IS114
	366	EM161	403	GL417	440	HS110	477	IS20
	367	EN426	404	GL428	441	HS154	478	IS337
	368	FE109	405	GL44	442	HS165	479	IS475
5	369	FH109	406	GL50	443	HS177	480	IS566
	370	FQ712	407	GW159	444	HS25	481	IS589
	371	FT124	408	GW263	445	HS278	482	IT213
	372	FT214	409	GW38	446	HS34	483	IT217
	373	FT222	410	GW48	447	HS351	484	IT240
10	374	FT318	411	GW75	448	HS413	485	IT250
	375	FT358	412	GZ440	449	HS432	486	IT263
	376	FT58	413	H1138	450	HS460	487	IT63
	377	FT62	414	H118	451	HS465	488	IT98
	378	FU149	415	H1305	452	HS470	489	IU103
15	379	FU171	416	H1317	453	HS66	490	IU176
	380	FU284	417	H1419	454	HS662	491	IU190
	381	FU309	418	H1428	455	HV233	492	IU202
	382	FU344	419	H1496	456	HX92	493	IU23
	383	FZ150	420	H206	457	IB60	494	IU61
20	384	G81	421	H237	458	IE42	495	IU63
	385	GA348	422	H298	459	IF338	496	IU88
	386	GC471	423	H31	460	IF50	497	IW47
	387	GC479	424	H318	461	IF605	498	IW66
	388	GE444	425	H455	462	IJ1129	499	IW73
25	389	GJ217	426	H617	463	IJ1193	500	IW79
	390	GJ270	427	H83	464	IJ1442	501	IW90
	391	GJ286	428	H857	465	IJ1542	502	IX118
	392	GL106	429	H863	466	IJ181	503	IX125
	393	GL110	430	H905	467	IJ226	504	IX62
30	394	GL140	431	H963	468	IK125	505	IY40
	395	GL15	432	HB1142	469	IK418	506	IY47
	396	GL278	433	HB1209	470	IK58	507	IY58
	397	GL294	434	HE153	471	IK93	508	IZ47
	398	GL32	435	HE212	472	IR162	509	J218
35	399	GL323	436	HL458	473	IR30	510	J59
	400	GL330	437	HR211	474	IR31	511	JA64
	401	GL366	438	HS100	475	IR70	512	JB17

	513	JF15	550	K113	587	K39	624	KB57
	514	JF64	551	K115	588	K40	625	KG2
	515	JF76	552	K122	589	K409	626	KH13
	516	JK39	553	K139	590	K417	627	KI195
5	517	JK45	554	K148	591	K421	628	KI253
	518	JL55	555	K155	592	K422	629	KI362
	519	JM33	556	K168	593	K426	630	KI493
	520	JM49	557	K176	594	K433	631	KJ1
	521	JM64	558	K178	595	K446	632	KJ10
10	522	JM75	559	K18	596	K464	633	KJ120
	523	JN33	560	K213	597	K483	634	KJ124
	524	JN85	561	K22	598	K488	635	KJ131
	525	JQ1	562	K227	599	K490	636	KJ141
	526	JQ29	563	K232	600	K51	637	KJ142
15	527	JS7	564	K233	601	K511	638	KJ19
	528	JT113	565	K235	602	K524	639	KJ190
	529	JT118	566	K240	603	K525	640	KJ215
	530	JT170	567	K254	604	K529	641	KJ218
	531	JT6	568	K255	605	K568	642	KJ231
20	532	JT61	569	K264	606	K60	643	KJ247
	533	JT62	570	K271	607	K619	644	KJ258
	534	JT65	571	K280	608	K640	645	KJ320
	535	JT77	572	K281	609	K67	646	KJ321
	536	JW117	573	K285	610	K71	647	KJ360
25	537	JW21	574	K289	611	K80	648	KJ41
	538	JW35	575	K294	612	K82	649	KJ46
	539	JW48	576	K30	613	KA105	650	KJ469
	540	JW91	577	K302	614	KA107	651	KJ480
	541	JY112	578	K314	615	KA108	652	KJ539
30	542	JY162	579	K32	616	KA113	653	KJ600
	543	JY2	580	K322	617	KA115	654	KJ611
	544	JY6	581	K330	618	KA3	655	KJ623
	545	JY61	582	K361	619	KA46	656	KJ63
	546	JZ13	583	K363	620	KA97	657	KJ664
35	547	JZ33	584	K368	621	KB137	658	KJ689
	548	JZ95	585	K370	622	KB2	659	KJ699
	549	K10	586	K38	623	KB49	660	KJ713

	661	KJ723	698	KN606	735	KX136	772	LE75
	662	KJ727	699	KN628	736	KX170	773	LF191
	663	KJ737	700	KN678	737	KY2	774	LF250
	664	KJ740	701	KO148	738	KY49	775	LF268
5	665	KJ748	702	KO174	739	KZ135	776	LF273
	666	KJ772	703	KO179	740	KZ165	777	LF307
	667	KJ777	704	KO258	741	KZ208	778	LF341
	668	KJ78	705	KO266	742	KZ288	779	LF378
	669	KJ793	706	KO319	743	KZ312	780	LF400
10	670	KJ8	707	KO332	744	KZ35	781	LF416
	671	KJ804	708	KO481	745	KZ46	782	LF470
	672	KJ807	709	KO50	746	KZ56	783	LF56
	673	KJ82	710	KO508	747	L102	784	LF6
	674	KJ853	711	KO575	748	L106	785	LG101
15	675	KJ870	712	KP86	749	L108	786	LG128
	676	KJ876	713	KQ27	750	L12	787	LG151
	677	KJ879	714	KR169	751	L129	788	LG155
	678	KJ96	715	KR190	752	L137	789	LG174
	679	KL109	716	KR221	753	L153	790	LG189
20	680	KL118	717	KR240	754	L161	791	LG237
	681	KL823	718	KR299	755	L189	792	LG26
	682	KL883	719	KR38	756	L195	793	LG264
	683	KL903	720	KS20	757	L196	794	LG280
	684	KM14	721	KS40	758	L198	795	LG322
25	685	KM157	722	KS41	759	L2	796	LG64
	686	KM225	723	KS47	760	L200	797	LH156
	687	KM288	724	KS71	761	L202	798	LH376
	688	KM309	725	KT25	762	L209	799	LI210
	689	KN1010	726	KT61	763	L238	800	LI302
30	690	KN1146	727	KU84	764	L250	801	LI307
	691	KN157	728	KU95	765	L256	802	LI392
	692	KN159	729	KV10	766	L3	803	LI506
	693	KN436	730	KV16	767	L5	804	LI515
	694	KN439	731	KV29	768	L64	805	LI674
35	695	KN446	732	KW27	769	L69	806	LI684
	696	KN487	733	KW28	770	LC85	807	LI705
	697	KN498	734	KW44	771	LE10	808	LI767

	809	LJ103	846	LR190	883	LS44	920	LU556
	810	LJ119	847	LR204	884	LS45	921	LU558
	811	LJ12	848	LR220	885	LS50	922	LU580
	812	LJ145	849	LR260	886	LS62	923	LU697
5	813	LJ290	850	LR286	887	LS87	924	LU724
	814	LK17	851	LR315	888	LS9	925	LU789
	815	LK57	852	LR32	889	LS98	926	LU810
	816	LL22	853	LR323	890	LT195	927	LU811
	817	LL89	854	LR337	891	LT255	928	LU820
10	818	LN86	855	LR347	892	LT28	929	LU864
	819	LO220	856	LR360	893	LT285	930	LV118
	820	LO292	857	LR381	894	LT289	931	LV157
	821	LO311	858	LR398	895	LT321	932	LV2
	822	LO32	859	LR406	896	LT369	933	LV209
15	823	LP118	860	LR432	897	LT380	934	LV253
	824	LP197	861	LR447	898	LT384	935	LV292
	825	LP274	862	LR561	899	LT386	936	LV296
	826	LP391	863	LR568	900	LT390	937	LV310
	827	LP436	864	LR57	901	LT403	938	LV317
20	828	LP474	865	LR596	902	LT410	939	LV331
	829	LP529	866	LR607	903	LT48	940	LV371
	830	LP547	867	LR612	904	LT595	941	LV376
	831	LP562	868	LR618	905	LT620	942	LV388
	832	LP572	869	LR636	906	LT634	943	LV435
25	833	LP574	870	LR76	907	LT646	944	LV449
	834	LP584	871	LR79	908	LT686	945	LV462
	835	LP585	872	LR95	909	LT96	946	LV505
	836	LP615	873	LS101	910	LU127	947	LV506
	837	LP631	874	LS120	911	LU164	948	LV528
30	838	LP667	875	LS121	912	LU211	949	LV555
	839	LP672	876	LS123	913	LU309	950	LV621
	840	LP675	877	LS139	914	LU38	951	LV85
	841	LP97	878	LS150	915	LU380	952	LV98
	842	LR110	879	LS16	916	LU399	953	LW1
35	843	LR128	880	LS18	917	LU460	954	LW104
	844	LR141	881	LS203	918	LU480	955	LW113
	845	LR170	882	LS36	919	LU524	956	LW123

	957	LW126	994	M66	1031	MC361	1068	ME252
	958	LW145	995	M8	1032	MC367	1069	ME253
	959	LW150	996	M83	1033	MC376	1070	ME258
	960	LW59	997	M93	1034	MC413	1071	ME387
5	961	LW63	998	M95	1035	MC69	1072	ME44
	962	LW97	999	MA101	1036	MC83	1073	ME456
	963	LX106	1000	MA122	1037	MC88	1074	ME495
	964	LX107	1001	MA130	1038	MC96	1075	ME505
	965	LX111	1002	MA158	1039	MD112	1076	ME514
10	966	LX115	1003	MA172	1040	MD124	1077	ME519
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	970	LX138	1007	MB261	1044	MD171	1081	ME691
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	974	LX18	1011	MB88	1048	MD303	1085	ME756
	975	LX226	1012	MC11	1049	MD312	1086	ME771
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	979	LX344	1016	MC155	1053	MD467	1090	MF135
	980	LX358	1017	MC180	1054	MD500	1091	MG101
25	981	LX59	1018	MC199	1055	MD521	1092	MG105
	982	LX73	1019	MC252	1056	MD536	1093	MG141
	983	LZ143	1020	MC286	1057	MD54	1094	MG168
	984	LZ290	1021	MC293	1058	MD544	1095	MG184
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	988	M171	1025	MC301	1062	MD80	1099	MG434
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	1113	MH318	1150	MI479	1187	MK337	1224	MM167
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	1123	MH703	1160	MJ310	1197	ML234	1234	MM426
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	1127	MI102	1164	MJ403	1201	ML246	1238	MM543
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	1133	MI276	1170	MJ80	1207	ML468	1244	MM72
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	1136	MI327	1173	MK106	1210	ML550	1247	MN265
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	1572	NG635	1609	NHAE123	1646	NI76	1683	NL567
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	1580	NH315	1617	NHAE96	1654	NK27	1691	NL659
	1581	NH328	1618	NHAG1	1655	NK40	1692	NL701
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	1720	NM99	1757	NN295	1794	NP156	1831	NQ25
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	1845	NS197	1882	NT789	1919	O2	1956	PC442
	1846	NS202	1883	NT829	1920	O238	1957	PD125
	1847	NS236	1884	NT830	1921	O271	1958	PD212
	1848	NS58	1885	NU101	1922	O279	1959	PD233
5	1849	NS65	1886	NU130	1923	O328	1960	PD240
	1850	NS70	1887	NU14	1924	O336	1961	PD278
	1851	NT271	1888	NU177	1925	O394	1962	PD309
	1852	NT301	1889	NU232	1926	O395	1963	PD319
	1853	NT374	1890	NU34	1927	O406	1964	PD444
10	1854	NT382	1891	NU35	1928	O84	1965	PD456
	1855	NT385	1892	NU356	1929	P12	1966	PE113
	1856	NT392	1893	NV120	1930	P2	1967	PE115
	1857	NT393	1894	NV213	1931	P22	1968	PE126
	1858	NT394	1895	NW175	1932	P30	1969	PE128
15	1859	NT396	1896	NW68	1933	P35	1970	PE143
	1860	NT418	1897	NW84	1934	P39	1971	PE159
	1861	NT428	1898	NX135	1935	P405	1972	PE163
	1862	NT429	1899	NX154	1936	P459	1973	PE166
	1863	NT430	1900	NY178	1937	P53	1974	PE172
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	1865	NT441	1902	NZ1	1939	P8	1976	PE186
	1866	NT444	1903	NZ101	1940	P9	1977	PE19
	1867	NT45	1904	NZ149	1941	PA85	1978	PE190
	1868	NT453	1905	NZ187	1942	PB15	1979	PE204
25	1869	NT457	1906	NZ190	1943	PB165	1980	PE205
	1870	NT512	1907	NZ229	1944	PB166	1981	PE213
	1871	NT528	1908	NZ345	1945	PB60	1982	PE223
	1872	NT53	1909	NZ77	1946	PC201	1983	PE227
	1873	NT533	1910	NZ85	1947	PC262	1984	PE23
30	1874	NT678	1911	O117	1948	PC335	1985	PE246
	1875	NT698	1912	O12	1949	PC349	1986	PE247
	1876	NT730	1913	O131	1950	PC379	1987	PE251
	1877	NT732	1914	O14	1951	PC381	1988	PE256
	1878	NT733	1915	O140	1952	PC41	1989	PE261
35	1879	NT742	1916	O177	1953	PC410	1990	PE262
	1880	NT746	1917	O185	1954	PC424	1991	PE272
	1881	NT780	1918	O199	1955	PC425	1992	PE286

	1993	PE287	2030	PE622	2067	PG117	2104	PJ193
	1994	PE293	2031	PE642	2068	PG195	2105	PJ196
	1995	PE299	2032	PE645	2069	PG284	2106	PJ212
	1996	PE301	2033	PE650	2070	PG330	2107	PJ239
5	1997	PE308	2034	PE659	2071	PG371	2108	PJ26
	1998	PE318	2035	PE673	2072	PG394	2109	PJ265
	1999	PE338	2036	PE676	2073	PG397	2110	PJ299
	2000	PE340	2037	PE677	2074	PG457	2111	PJ311
	2001	PE363	2038	PE678	2075	PH148	2112	PJ314
10	2002	PE383	2039	PE691	2076	PH174	2113	PJ317
	2003	PE399	2040	PE70	2077	PH226	2114	PJ323
	2004	PE400	2041	PE727	2078	PH60	2115	PJ350
	2005	PE403	2042	PE738	2079	PH79	2116	PJ356
	2006	PE416	2043	PE750	2080	PH92	2117	PJ365
15	2007	PE430	2044	PE765	2081	PI13	2118	PJ372
	2008	PE443	2045	PE768	2082	PI191	2119	PJ375
	2009	PE47	2046	PE776	2083	PI198	2120	PJ414
	2010	PE480	2047	PE777	2084	PI231	2121	PJ422
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20	2012	PE503	2049	PE789	2086	PI279	2123	PJ439
	2013	PE505	2050	PE80	2087	PI323	2124	PJ46
	2014	PE512	2051	PE806	2088	PI40	2125	PJ463
	2015	PE518	2052	PE807	2089	PI62	2126	PJ471
	2016	PE526	2053	PE808	2090	PJ1	2127	PJ488
25	2017	PE540	2054	PE817	2091	PJ11	2128	PJ495
	2018	PE541	2055	PE834	2092	PJ130	2129	PJ496
	2019	PE546	2056	PE840	2093	PJ132	2130	PJ502
	2020	PE549	2057	PE842	2094	PJ14	2131	PJ518
	2021	PE551	2058	PE843	2095	PJ142	2132	PJ525
30	2022	PE564	2059	PE862	2096	PJ145	2133	PJ53
	2023	PE565	2060	PE91	2097	PJ154	2134	PJ544
	2024	PE567	2061	PF146	2098	PJ157	2135	PJ546
	2025	PE571	2062	PF231	2099	PJ161	2136	PJ78
	2026	PE574	2063	PF291	2100	PJ167	2137	PJ8
35	2027	PE584	2064	PF296	2101	PJ172	2138	PJ95
	2028	PE585	2065	PF3	2102	PJ181	2139	PK100
	2029	PE615	2066	PF375	2103	PJ186	2140	PK103

	2141	PK106	2178	PK558	2215	PL207	2252	PL491
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	2146	PK155	2183	PK65	2220	PL268	2257	PL52
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	2156	PK259	2193	PK817	2230	PL358	2267	PL603
	2157	PK262	2194	PK819	2231	PL36	2268	PL614
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	2159	PK266	2196	PK831	2233	PL369	2270	PL664
20	2160	PK267	2197	PK855	2234	PL378	2271	PL67
	2161	PK271	2198	PK857	2235	PL385	2272	PL673
	2162	PK284	2199	PK864	2236	PL386	2273	PL69
	2163	PK317	2200	PK878	2237	PL391	2274	PL701
	2164	PK326	2201	PL104	2238	PL409	2275	PL71
25	2165	PK332	2202	PL105	2239	PL414	2276	PL719
	2166	PK335	2203	PL106	2240	PL42	2277	PL725
	2167	PK359	2204	PL110	2241	PL421	2278	PL730
	2168	PK366	2205	PL111	2242	PL433	2279	PL741
	2169	PK398	2206	PL125	2243	PL434	2280	PL747
30	2170	PK405	2207	PL146	2244	PL44	2281	PL750
	2171	PK430	2208	PL157	2245	PL445	2282	PL751
	2172	PK436	2209	PL159	2246	PL455	2283	PL765
	2173	PK457	2210	PL16	2247	PL457	2284	PL772
	2174	PK473	2211	PL164	2248	PL461	2285	PL773
35	2175	PK474	2212	PL189	2249	PL463	2286	PL776
	2176	PK503	2213	PL19	2250	PL464	2287	PL784
	2177	PK551	2214	PL205	2251	PL486	2288	PL803

	2289	PL830	2326	PM260	2363	PM516	2400	PM783
	2290	PL845	2327	PM275	2364	PM523	2401	PM789
	2291	PL85	2328	PM289	2365	PM524	2402	PM790
	2292	PL87	2329	PM297	2366	PM527	2403	PM801
5	2293	PL89	2330	PM303	2367	PM529	2404	PM803
	2294	PM1	2331	PM305	2368	PM53	2405	PM812
	2295	PM103	2332	PM306	2369	PM537	2406	PM830
	2296	PM105	2333	PM310	2370	PM545	2407	PM840
	2297	PM110	2334	PM314	2371	PM546	2408	PM841
10	2298	PM113	2335	PM323	2372	PM554	2409	PM842
	2299	PM126	2336	PM34	2373	PM562	2410	PM843
	2300	PM129	2337	PM347	2374	PM579	2411	PM849
	2301	PM136	2338	PM362	2375	PM583	2412	PM854
	2302	PM141	2339	PM371	2376	PM596	2413	PM96
15	2303	PM142	2340	PM385	2377	PM6	2414	PO12
	2304	PM144	2341	PM387	2378	PM601	2415	PO30
	2305	PM150	2342	PM39	2379	PM605	2416	PO36
	2306	PM158	2343	PM393	2380	PM623	2417	PO42
	2307	PM161	2344	PM397	2381	PM624	2418	PO72
20	2308	PM170	2345	PM4	2382	PM627	2419	PP1
	2309	PM173	2346	PM40	2383	PM633	2420	PP10
	2310	PM180	2347	PM404	2384	PM672	2421	PP101
	2311	PM182	2348	PM412	2385	PM681	2422	PP110
	2312	PM19	2349	PM413	2386	PM692	2423	PP117
25	2313	PM195	2350	PM415	2387	PM696	2424	PP128
	2314	PM198	2351	PM42	2388	PM697	2425	PP131
	2315	PM200	2352	PM421	2389	PM717	2426	PP133
	2316	PM202	2353	PM430	2390	PM722	2427	PP136
	2317	PM21	2354	PM434	2391	PM738	2428	PP138
30	2318	PM213	2355	PM446	2392	PM741	2429	PP163
	2319	PM217	2356	PM455	2393	PM749	2430	PP165
	2320	PM229	2357	PM46	2394	PM753	2431	PP173
	2321	PM243	2358	PM476	2395	PM758	2432	PP175
	2322	PM245	2359	PM482	2396	PM767	2433	PP194
35	2323	PM248	2360	PM503	2397	PM769	2434	PP210
	2324	PM249	2361	PM51	2398	PM776	2435	PP212
	2325	PM256	2362	PM514	2399	PM782	2436	PP216

	2437	PP219	2474	PP393
	2438	PP224	2475	PP395
	2439	PP226	2476	PP398
	2440	PP227	2477	PP407
5	2441	PP23	2478	PP411
	2442	PP230	2479	PP413
	2443	PP233	2480	PP422
	2444	PP242	2481	PP428
	2445	PP243	2482	PP430
10	2446	PP244	2483	PP451
	2447	PP245	2484	PP454
	2448	PP255	2485	PP457
	2449	PP260	2486	PP46
	2450	PP261	2487	PP469
15	2451	PP267	2488	PP47
	2452	PP276	2489	PP482
	2453	PP292	2490	PP487
	2454	PP297	2491	PP5
	2455	PP299	2492	PP509
20	2456	PP303	2493	PP51
	2457	PP308	2494	PP517
	2458	PP314	2495	PP525
	2459	PP321	2496	PP54
	2460	PP325	2497	PP60
25	2461	PP330	2498	PP7
	2462	PP332	2499	PP71
	2463	PP337	2500	PP80
	2464	PP345		
	2465	PP35		
30	2466	PP356		
	2467	PP367		
	2468	PP379		
	2469	PP386		
	2470	PP387		
35	2471	PP389		
	2472	PP390		
	2473	PP392		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified
5 in Table 3 by the one and two letter designations used in the relevant "Clone ID No." in Table 2. For example, a clone designated as "AA239" would have been isolated from a human fetal kidney library (i.e., selection "AA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

10 As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without
15 limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known
20 methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be
25 fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

30 The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form(s) of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable

mammalian cell or other host cell. The sequence(s) of the mature form(s) of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the
5 polynucleotide sequences disclosed herein. "Corresponding genes" are the regions of the genome that are transcribed to produce the mRNAs from which cDNA polynucleotide sequences are derived and may include contiguous regions of the genome necessary for the regulated expression of such genes. Corresponding genes may therefore include but are not limited to coding sequences, 5' and 3' untranslated
10 regions, alternatively spliced exons, introns, promoters, enhancers, and silencer or suppressor elements. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification and/or amplification of genes in appropriate genomic libraries or
15 other sources of genomic materials. An "isolated gene" is a gene that has been separated from the adjacent coding sequences, if any, present in the genome of the organism from which the gene was isolated.

The chromosomal location corresponding to the polynucleotide sequences disclosed herein may also be determined, for example by hybridizing appropriately
20 labeled polynucleotides of the present invention to chromosomes *in situ*. It may also be possible to determine the corresponding chromosomal location for a disclosed polynucleotide by identifying significantly similar nucleotide sequences in public databases, such as expressed sequence tags (ESTs), that have already been mapped to particular chromosomal locations. For at least some of the polynucleotide
25 sequences disclosed herein, public database sequences having at least some similarity to the polynucleotide of the present invention have been listed by database accession number. Searches using the GenBank accession numbers of these public database sequences can then be performed at an Internet site provided by the National Center for Biotechnology Information having the address www.ncbi.nlm.nih.gov/UniGene,
30 in order to identify "UniGene clusters" of overlapping sequences. Many of the "UniGene clusters" so identified will already have been mapped to particular chromosomal sites.

Organisms that have enhanced, reduced, or modified expression of the gene(s) corresponding to the polynucleotide sequences disclosed herein are provided.

The desired change in gene expression can be achieved through the use of antisense polynucleotides or ribozymes that bind and/or cleave the mRNA transcribed from the gene (Albert and Morris, 1994, *Trends Pharmacol. Sci.* 15(7): 250-254; Lavarosky *et al.*, 1997, *Biochem. Mol. Med.* 62(1): 11-22; and Hampel, 1998, *Prog. Nucleic Acid Res. Mol. Biol.* 58: 1-39; all of which are incorporated by reference herein). Transgenic animals that have multiple copies of the gene(s) corresponding to the polynucleotide sequences disclosed herein, preferably produced by transformation of cells with genetic constructs that are stably maintained within the transformed cells and their progeny, are provided. Transgenic animals that have modified genetic control regions that increase or reduce gene expression levels, or that change temporal or spatial patterns of gene expression, are also provided (see European Patent No. 0 649 464 B1, incorporated by reference herein). In addition, organisms are provided in which the gene(s) corresponding to the polynucleotide sequences disclosed herein have been partially or completely inactivated, through insertion of extraneous sequences into the corresponding gene(s) or through deletion of all or part of the corresponding gene(s). Partial or complete gene inactivation can be accomplished through insertion, preferably followed by imprecise excision, of transposable elements (Plasterk, 1992, *Bioessays* 14(9): 629-633; Zwaal *et al.*, 1993, *Proc. Natl. Acad. Sci. USA* 90(16): 7431-7435; Clark *et al.*, 1994, *Proc. Natl. Acad. Sci. USA* 91(2): 719-722; all of which are incorporated by reference herein), or through homologous recombination, preferably detected by positive/negative genetic selection strategies (Mansour *et al.*, 1988, *Nature* 336: 348-352; U.S. Patent Nos. 5,464,764; 5,487,992; 5,627,059; 5,631,153; 5,614,396; 5,616,491; and 5,679,523; all of which are incorporated by reference herein). These organisms with altered gene expression are preferably eukaryotes and more preferably are mammals. Such organisms are useful for the development of non-human models for the study of disorders involving the corresponding gene(s), and for the development of assay systems for the identification of molecules that interact with the protein product(s) of the corresponding gene(s).

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention

can be identified in accordance with known techniques for determination of such domains from sequence information.

Proteins and protein fragments of the present invention include proteins with amino acid sequence lengths that are at least 25% (more preferably at least 50%, and most preferably at least 75%) of the length of a disclosed protein and have at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least 90% or 95% identity) with that disclosed protein, where sequence identity is determined by comparing the amino acid sequences of the proteins when aligned so as to maximize overlap and identity while minimizing sequence gaps. Also included in the present invention are proteins and protein fragments that contain a segment preferably comprising 8 or more (more preferably 20 or more, most preferably 30 or more) contiguous amino acids that shares at least 75% sequence identity (more preferably, at least 85% identity; most preferably at least 95% identity) with any such segment of any of the disclosed proteins.

In particular, sequence identity may be determined using WU-BLAST (Washington University BLAST) version 2.0 software, which builds upon WU-BLAST version 1.4, which in turn is based on the public domain NCBI-BLAST version 1.4 (Altschul and Gish, 1996, Local alignment statistics, Doolittle *ed.*, *Methods in Enzymology* **266**: 460-480; Altschul *et al.*, 1990, Basic local alignment search tool, *Journal of Molecular Biology* **215**: 403-410; Gish and States, 1993, Identification of protein coding regions by database similarity search, *Nature Genetics* **3**: 266-272; Karlin and Altschul, 1993, Applications and statistics for multiple high-scoring segments in molecular sequences, *Proc. Natl. Acad. Sci. USA* **90**: 5873-5877; all of which are incorporated by reference herein). WU-BLAST version 2.0 executable programs for several UNIX platforms can be downloaded from the Internet file-transfer protocol (FTP) site <ftp://blast.wustl.edu/blast/executables>. The complete suite of search programs (BLASTP, BLASTN, BLASTX, TBLASTN, and TBLASTX) is provided at that site, in addition to several support programs. WU-BLAST 2.0 is copyrighted and may not be sold or redistributed in any form or manner without the express written consent of the author; but the posted executables may otherwise be freely used for commercial, nonprofit, or academic purposes. In all search programs in the suite -- BLASTP, BLASTN, BLASTX, TBLASTN and

TBLASTX -- the gapped alignment routines are integral to the database search itself, and thus yield much better sensitivity and selectivity while producing the more easily interpreted output. Gapping can optionally be turned off in all of these programs, if desired. The default penalty (Q) for a gap of length one is Q=9 for proteins and
5 BLASTP, and Q=10 for BLASTN, but may be changed to any integer value including zero, one through eight, nine, ten, eleven, twelve through twenty, twenty-one through fifty, fifty-one through one hundred, etc. The default per-residue penalty for extending a gap (R) is R=2 for proteins and BLASTP, and R=10 for BLASTN, but may be
10 changed to any integer value including zero, one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve through twenty, twenty-one through fifty, fifty-one through one hundred, etc. Any combination of values for Q and R can be used in order to align sequences so as to maximize overlap and identity while minimizing sequence gaps. The default amino acid comparison matrix is BLOSUM62, but other amino acid comparison matrices such as PAM can be utilized.

15 Species homologues of the disclosed polynucleotides and proteins are also provided by the present invention. As used herein, a "species homologue" is a protein or polynucleotide with a different species of origin from that of a given protein or polynucleotide, but with significant sequence similarity to the given protein or polynucleotide. Preferably, polynucleotide species homologues have at least 60%
20 sequence identity (more preferably, at least 75% identity; most preferably at least 90% identity) with the given polynucleotide, and protein species homologues have at least 30% sequence identity (more preferably, at least 45% identity; most preferably at least 60% identity) with the given protein, where sequence identity is determined by comparing the nucleotide sequences of the polynucleotides or the amino acid
25 sequences of the proteins when aligned so as to maximize overlap and identity while minimizing sequence gaps. Species homologues may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species. Preferably, species homologues are those isolated from mammalian species. Most preferably, species
30 homologues are those isolated from certain mammalian species such as, for example, *Pan troglodytes*, *Gorilla gorilla*, *Pongo pygmaeus*, *Hylobates concolor*, *Macaca mulatta*, *Papio papio*, *Papio hamadryas*, *Cercopithecus aethiops*, *Cebus capucinus*, *Aotus trivirgatus*,

Sanguinus oedipus, *Microcebus murinus*, *Mus musculus*, *Rattus norvegicus*, *Cricetulus griseus*, *Felis catus*, *Mustela vison*, *Canis familiaris*, *Oryctolagus cuniculus*, *Bos taurus*, *Ovis aries*, *Sus scrofa*, and *Equus caballus*, for which genetic maps have been created allowing the identification of syntenic relationships between the genomic organization of genes in one species and the genomic organization of the related genes in another species (O'Brien and Seuánez, 1988, *Ann. Rev. Genet.* 22: 323-351; O'Brien *et al.*, 1993, *Nature Genetics* 3:103-112; Johansson *et al.*, 1995, *Genomics* 25: 682-690; Lyons *et al.*, 1997, *Nature Genetics* 15: 47-56; O'Brien *et al.*, 1997, *Trends in Genetics* 13(10): 393-399; Carver and Stubbs, 1997, *Genome Research* 7:1123-1137; all of which are incorporated by reference herein).

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotides which also encode proteins which are identical or have significantly similar sequences to those encoded by the disclosed polynucleotides. Preferably, allelic variants have at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least 90% identity) with the given polynucleotide, where sequence identity is determined by comparing the nucleotide sequences of the polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. Allelic variants may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from individuals of the appropriate species.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides that hybridize under reduced stringency conditions, more preferably stringent conditions, and most preferably highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in the table below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) [‡]	Hybridization Temperature and Buffer [†]	Wash Temperature and Buffer [†]
5	A	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	<50	T _B [*] ; 1xSSC	T _B [*] ; 1xSSC
	C	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	<50	T _D [*] ; 1xSSC	T _D [*] ; 1xSSC
	E	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
	F	<50	T _F [*] ; 1xSSC	T _F [*] ; 1xSSC
10	G	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	<50	T _H [*] ; 4xSSC	T _H [*] ; 4xSSC
	I	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	<50	T _J [*] ; 4xSSC	T _J [*] ; 4xSSC
	K	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	<50	T _L [*] ; 2xSSC	T _L [*] ; 2xSSC
15	M	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	<50	T _N [*] ; 6xSSC	T _N [*] ; 6xSSC
	O	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
	P	<50	T _P [*] ; 6xSSC	T _P [*] ; 6xSSC
	Q	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	<50	T _R [*] ; 4xSSC	T _R [*] ; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

^{*}T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base

pairs in length, $T_m(^{\circ}\text{C}) = 81.5 + 16.6(\log_{10}[\text{Na}^+]) + 0.41(\%G+C) - (600/N)$, where N is the number of bases in the hybrid, and $[\text{Na}^+]$ is the concentration of sodium ions in the hybridization buffer ($[\text{Na}^+]$ for 1xSSC = 0.165 M).

5 Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4,
10 incorporated herein by reference.

Preferably, each such hybridizing polynucleotide has a length that is at least 25%(more preferably at least 50%, and most preferably at least 75%) of the length of the polynucleotide of the present invention to which it hybridizes, and has at least 60% sequence identity (more preferably, at least 75% identity; most preferably at least
15 90% or 95% identity) with the polynucleotide of the present invention to which it hybridizes, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps.

The isolated polynucleotide of the invention may contain sequences at its 5' and/or 3' end that are derived from linker, polylinker, or multiple cloning site sequences commonly found in vectors such as the pMT2 or pED expression vectors (see below). For example, sequences such as SEQ ID NO:2501, SEQ ID NO:2502, or SEQ ID NO:2503 may be found at the 5' end of an isolated polynucleotide of the invention, or the complement of any of these sequences may be found at its 3' end.
20 Similarly, sequences such as SEQ ID NO:2504, SEQ ID NO:2505, or SEQ ID NO:2506 may be found at the 3' end of an isolated polynucleotide of the invention, or the complement of any of these sequences may be found at its 5' end. In addition, variants of these linker sequences may be present in isolated polynucleotides of the invention, which linker variants vary from SEQ ID NO:2501 through SEQ ID NO:2506
25 by the alteration, insertion, or deletion of one or more nucleotides. Therefore, a preferred embodiment of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 25 and ending at nucleotide (N-25) of the SEQ ID NO for that polynucleotide, where N represents the total number of nucleotides in the sequence. As a specific example, a preferred
30 embodiment of the invention comprises the nucleotide sequence of SEQ ID NO:1
35

from nucleotide 25 to nucleotide 291, where the total number of nucleotides (N) in SEQ ID NO:1 is 316, and N-25 equals 291. More preferably, a polynucleotide of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 30 and ending at nucleotide (N-30) of the
5 SEQ ID NO for that polynucleotide. Most preferably, a polynucleotide of the invention comprises the nucleotide sequence of any of the isolated polynucleotides disclosed herein, beginning at nucleotide 35 and ending at nucleotide (N-35) of the SEQ ID NO for that polynucleotide.

The isolated polynucleotide of the invention may be operably linked to an
10 expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, Nucleic Acids Res. 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, Methods in Enzymology 185, 537-566 (1990). As defined
15 herein "operably linked" means that the isolated polynucleotide of the invention and an expression control sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the
20 protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes
25 such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella*
30 *typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

10 The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

20 Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLabs (Beverly, MA), Pharmacia (Piscataway, NJ) and Invitrogen Corporation (Carlsbad, CA), respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from the Eastman Kodak Company (New Haven, CT).

30 Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, *e.g.*, silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant

protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep
5 which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences,
10 by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

15 The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications of interest in the protein sequences may include the
20 alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No.
25 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those
30 skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to

identify polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations.

5 Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D,
10 DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those
15 described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli
20 et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: *Polyclonal T cell stimulation*, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons,
25 Toronto. 1994; and *Measurement of mouse and human Interferon γ* , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and
30 lymphopoietic cells include, without limitation, those described in: *Measurement of Human and Murine Interleukin 2 and Interleukin 4*, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc.*

- Natl. Acad. Sci. U.S.A. 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F.,
- 5 Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 - Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- 10 Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and
- 15 Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun. 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

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Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various
- 25 immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune
- 30 disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, *Leishmania* spp., *malaria* spp. and various fungal infections such as candidiasis. Of course, in this

regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, *i.e.*, in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also to be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having

B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (e.g., B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal.

- 5 Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-blocking reagents may avoid the necessity of repeated administration of
10 these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

- The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy
15 in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models
20 of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

- Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate
25 activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to
30 inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number

of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythmatosis in MRL/*lpr/lpr* mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia
5 gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an
10 existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

15 Alternatively, anti-viral immune responses may be enhanced in an infected patient by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of
20 enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate,
25 T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one
30 peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-

like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection *in vivo*.

- 5 The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or which fail to reexpress sufficient amounts of MHC class I or
- 10 MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I or class II MHC in conjunction with a
- 15 peptide having the activity of a B lymphocyte antigen (*e.g.*, B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote
- 20 presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

- 25 Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc.
- 30 Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J.

Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype
 5 switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John
 10 Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing
 15 Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins
 20 expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., *Journal of Experimental Medicine* 173:549-559, 1991; Macatonia et al., *Journal of Immunology* 154:5071-5079, 1995; Porgador et al., *Journal of Experimental Medicine* 182:255-260, 1995; Nair et al., *Journal of Virology* 67:4062-4069, 1993; Huang et al., *Science*
 25 264:961-965, 1994; Macatonia et al., *Journal of Experimental Medicine* 169:1255-1264, 1989; Bhardwaj et al., *Journal of Clinical Investigation* 94:797-807, 1994; and Inaba et al., *Journal of Experimental Medicine* 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that
 30 regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., *Cytometry* 13:795-808, 1992; Gorczyca et al., *Leukemia* 7:659-670, 1993; Gorczyca et al., *Cancer Research* 53:1945-1951, 1993; Itoh et al., *Cell* 66:233-243, 1991; Zacharchuk, *Journal of Immunology* 145:4037-4045, 1990; Zamai et

al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland, H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an

osteogenic agent contributes to the repair of congenital, trauma induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an
5 environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by
10 inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application
15 in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to
20 tendon or ligament tissue. De novo tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon-
25 or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The
30 compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as

mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT,

eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

Activin/Inhibin Activity

5 A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention, alone or in heterodimers with a member of the inhibin α family,
10 may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may be useful as a
15 fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and
20 pigs.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986;
25 Vale et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

A protein of the present invention may have chemotactic or chemokinetic
30 activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide particular advantages in treatment of wounds and

other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

5 A protein or peptide has chemotactic activity for a particular cell population if it can stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce
15 the adhesion of one cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W.Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al.
20 J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

25 A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A protein of the invention may also be useful for
30 dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

5

Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their
10 ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are
15 also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be
20 measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static
25 conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med. 169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

30 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting

chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute
5 conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality, arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of
10 cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or
15 prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis),
20 by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting (suppressing or enhancing) bodily characteristics, including,
30 without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination

of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing
5 analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the
10 ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

15

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The

antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be
5 combined with the pharmaceutical composition of the invention.

The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar
10 layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of
15 which are incorporated herein by reference.

As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment,
20 healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

25 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines,
30 lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on

the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 ng to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal

antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800

microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

A preferred family of sequestering agents is cellulosic materials such as
5 alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include
10 hyaluronic acid, sodium alginate, poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby
15 providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal
20 growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present
25 invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged
30 tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I),

to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy.

- 5 Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

- 10 Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

TABLE 3

<u>Sel.</u>	<u>Species</u>	<u>Stage</u>	<u>Tissue</u>	<u>Cell Type</u>	<u>Treatment</u>
AA	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AC	Human	Adult	Placenta	26yrs., 1 specimen	None
AD	Mouse	Fetal	Embryo	ES cells	LIF
AE	Mouse	Adult	Spleen	N/A	ConA + dendritic cells
AF	Mouse	Fetal	Brain	N/A	None
AG	Mouse	Fetal	Brain	N/A	None
AH	Mouse	Fetal	Thymus	N/A	None
AJ	Human	Adult	Testes	10-61yrs., pool of 11	None
AK	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AM	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
AN	Mouse	Adult	Bone Marrow	Stromal cell line FCM-4	None
AO	Mouse	Adult	Thymus	N/A	None
AP	Human	Adult	Placenta	26yrs., 1 specimen	None
AQ	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
AR	Human	Adult	Retina	16-75yrs., pool of 76	None
AS	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
AT	Human	Adult	Blood	Lymphocytes+Dendritic Cells	MLR
AU	Human	Adult	Testes	10-61yrs., pool of 11	None
AV	Mouse	Adult	Spleen	N/A	ConA + dendritic cells
AW	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
AX	Human	Adult	Testes	10-61yrs., pool of 11	None
AY	Human	Adult	Retina	16-75yrs., pool of 76	None
AZ	Human	Adult	Colon	Adenocarcinoma Caco2	None
BB	Human	N/A	Blood	Adult PBMC/TH1or2	TH1or2 driven response
BC	Mouse	Fetal	Embryo	ES cells	LIF
BD	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
BG	Human	Adult	Brain	N/A	None
BH	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
BI	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
BJ	Human	Adult	Ovary	PA-1 Teratocarcinoma	RA or Activin or None
BL	Human	Adult	Testes	10-61yrs., pool of 11	None
BN	Human	Adult	Placenta	26yrs., 1 specimen	None
BO	Human	Adult	Retina	16-75yrs., pool of 76	None
BP	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None

BT	Human	Adult	Blood	PBMC	None
BV	Human	Adult	Brain	N/A	None
BZ	Human	Fetal	Kidney	19-23wks., M/F pool of 5	None
C	Human	Adult	Blood	PBMC	conA + PMA
CA	Mouse	Fetal	Embryo	ES cell embryoid bodies	2-12 days post LIF
CC	Human	Adult	Brain	N/A	None
CJ	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
CL	Human	Adult	Retina	16-75yrs., pool of 76	None
CR	Human	Adult	Testes	10-61yrs., pool of 11	None
D	Human	Adult	Blood	PBMC	conA + PMA
DD	Human	Adult	Testes	10-61yrs., pool of 11	None
DG	Human	Adult	Placenta	26yrs., 1 specimen	None
DH	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
DI	Human	Adult	Testes	10-61yrs., pool of 11	None
DL	Human	Adult	Brain	N/A	None
DO	Human	Adult	Testes	10-61yrs., pool of 11	None
DP	Mouse	Fetal	Embryo	ES cell embryoid bodies	2-12 days post LIF
DU	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
DY	Human	Adult	Brain	N/A	None
DZ	Human	Adult	Testes	Teratocarcinoma NCCIT	None
EF	Human	Adult	Liver	N/A	None
EK	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
EM	Human	Fetal	Kidney	N/A	None
EN	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
FE	Human	Adult	Brain	N/A	None
FH	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
FQ	Human	Adult	Testes	10-61yrs., pool of 11	None
FT	Chicken	Fetal	Fetal Lung	Fetal Lung	N/A
FU	Chicken	Fetal	Limb Bud	Fetal St. 23 Limb Bud	N/A
FZ	Human	Adult	Placenta	26yrs., 1 specimen	None
G	Human	Adult	Blood	PBMC	conA + PMA
GA	Human	Adult	Testes	10-61yrs., pool of 11	None
GC	Human	Adult	Testes	10-61yrs., pool of 11	None
GE	Human	Adult	Brain	N/A	None
GJ	Mouse	Adult	Spleen	N/A	IL-12
GL	Mouse	Adult	Lymph Node	N/A	IL-12
GW	Chicken	26	Limb Bud	Fetal St.26 Limb Bud	N/A

GZ	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
H	Human	Adult	Blood	PBMC	PHA+PMA+MLR
HB	Human	Fetal	Kidney	N/A	None
HE	Human	Adult	Testes	10-61yrs., pool of 11	None
HL	Human	Fetal	Kidney	N/A	None
HR	Human	Adult	Brain	N/A	None
HS	Human	Adult	Brain	N/A	None
HV	Human	Adult	Testes	10-61yrs., pool of 11	None
HX	Human	Adult	Brain	Hippocampus	None
IB	Human	Fetal	Carcinoma	NTD2-1	None
IE	Human	Fetal	Brain	19-23wks., M/F pool of 5	None
IF	Human	Adult	Uterus	N/A	None
IJ	Human	Adult	Blood	PBMC	GCSF in vivo
IK	Human	Adult	Retina	Retinoblastoma Y79	None
IR	Human	Adult	Brain	Hippocampus	None
IS	Human	Adult	Trachea	N/A	None
IT	Human	Adult	Brain	Thalamus	None
IU	Human	Adult	Thyroid	N/A	None
IW	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
IX	Human	Adult	Brain	N/A	None
IY	Human	Adult	Brain	N/A	None
IZ	Human	Adult	Brain	N/A	None
J	Human	Adult	Blood	PBMC	PHA+PMA+MLR
JA	Human	Adult	Retina	16-75yrs., pool of 76	None
JB	Human	Adult	Retina	16-75yrs., pool of 76	None
JF	Human	Adult	Retina	16-75yrs., pool of 76	None
JK	Human	Fetal	Kidney	N/A	None
JL	Human	Fetal	Kidney	N/A	None
JM	Human	Adult	Testes	10-61yrs., pool of 11	None
JN	Human	Adult	Retina	16-75yrs., pool of 76	None
JQ	Human	Adult	Testes	10-61yrs., pool of 11	None
JS	Human	Adult	Testes	10-61yrs., pool of 11	None
JT	Human	Adult	Retina	16-75yrs., pool of 76	None
JW	Human	Adult	Testes	10-61yrs., pool of 11	None
JY	Human	Adult	Testes	10-61yrs., pool of 11	None
JZ	Human	Adult	Retina	16-75yrs., pool of 76	None
K	Mouse	Adult	Bone Marrow	Adult Stromal cell line FCM-4	None

KA	Human	Adult	Testes	10-61yrs., pool of 11	None
KB	Human	Adult	Retina	16-75yrs., pool of 76	None
KG	Human	Adult	Testes	10-61yrs., pool of 11	None
KH	Human	Adult	Testes	10-61yrs., pool of 11	None
KI	Human	Adult	Retina	Retinoblastoma Y79	None
KJ	Human	Fetal	Brain	N/A	None
KL	Human	Adult	Brain	N/A	None
KM	Human	Adult	Retina	Retinoblastoma Y79	None
KN	Human	Adult	Blood	PBMC	GCSF in vivo
KO	Human	Adult	Uterus	N/A	None
KP	Human	Adult	Retina	16-75yrs., pool of 76	None
KQ	Human	Adult	Retina	16-75yrs., pool of 76	None
KR	Human	Adult	Retina	16-75yrs., pool of 76	None
KS	Human	Adult	Retina	16-75yrs., pool of 76	None
KT	Human	Adult	Retina	16-75yrs., pool of 76	None
KU	Human	Adult	Retina	16-75yrs., pool of 76	None
KV	Human	Adult	Retina	16-75yrs., pool of 76	None
KW	Human	Adult	Retina	16-75yrs., pool of 76	None
KX	Human	Adult	Retina	16-75yrs., pool of 76	None
KY	Human	Adult	Retina	16-75yrs., pool of 76	None
KZ	Human	Adult	Retina	16-75yrs., pool of 76	None
L	Mouse	Adult	Thymus	N/A	None
LC	Human	Adult	Retina	16-75yrs., pool of 76	None
LE	Human	Adult	Retina	16-75yrs., pool of 76	None
LF	Human	Adult	Spinal Cord	N/A	None
LG	Human	Adult	Testes	N/A	None
LH	Human	Fetal	Liver	N/A	None
LI	Human	Adult	Brain	N/A	None
LJ	Human	Fetal	Carcinoma	NTD2-1	None
LK	Human	Fetal	Carcinoma	NTD2-1	None
LL	Human	Adult	Thyroid	N/A	None
LN	Human	Adult	Uterus	N/A	None
LO	Human	Adult	Thyroid	N/A	None
LP	Human	Adult	Blood	PBMC	GCSF in vivo
LR	Human	Adult	Lymph Node	N/A	None
LS	Human	Adult	Brain	Substantia Nigra	None
LT	Human	Adult	Retina	Retinoblastoma Y79	None

LU	Human	Adult	Retina	Retinoblastoma Y79	None
LV	Human	Adult	Thyroid	N/A	None
LW	Human	Fetal	Carcinoma	NTD2-1	None
LX	Human	Fetal	Kidney	N/A	None
LZ	Human	Adult	Uterus	N/A	None
M	Human	Adult	Neural	Glioblastoma line T98G	None
MA	Human	Fetal	Carcinoma	NTD2-1	None
MB	Human	Adult	Spinal Cord	N/A	None
MC	Human	Adult	Thyroid	N/A	None
MD	Human	Fetal	Kidney	N/A	None
ME	Human	Adult	Brain	Substantia Nigra	None
MF	Human	Fetal	Kidney	N/A	None
MG	Human	Adult	Brain	Hippocampus	None
MH	Human	Adult	Brain	Thalamus	None
MI	Human	Adult	Spinal Cord	N/A	None
MJ	Human	Adult	Lymph Node	N/A	None
MK	Human	Adult	Testes	N/A	None
ML	Human	Adult	Brain	Caudate Nucleus	None
MM	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
MN	Human	Adult	Brain	Hippocampus	None
MP	Human	Adult	Testes	N/A	None
MQ	Human	Adult	Testes	N/A	None
MR	Human	Adult	Testes	N/A	None
MS	Human	Adult	Testes	N/A	None
MT	Human	Adult	Testes	N/A	None
MU	Human	Adult	Testes	N/A	None
MX	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
MY	Human	Fetal	Brain	N/A	None
MZ	Human	Adult	Spinal Cord	N/A	None
N	Rat	Fetal	Pancreas	N/A	None
NA	Human	Adult	Brain	Corpus Callosum	None
NB	Human	Adult	Spinal Cord	N/A	None
NC	Human	Adult	Prostate	N/A	None
ND	Human	Adult	Prostate	N/A	None
NE	Human	Adult	Brain	Hippocampus	None
NF	Human	Adult	Brain	Substantia Nigra	None
NG	Human	Adult	Brain	Hippocampus	None

NH	Human	Adult	Brain	Thalamus	None
NHAB	Chicken	34	Limb Bud	Fetal St.34 Limb Bud	N/A
NHAE	Mouse	Adult	Tumor	N/A	IL-12
NHAG	Mouse	Adult	Bone Marrow	Dendritic Cells	LPS/gamma IFN
NHAN	Mouse	Adult	Tumor	N/A	IL-12
NHAW	Mouse	Adult	Bone Marrow	Dendritic Cells	Resting
NI	Human	Adult	Thyroid	N/A	None
NJ	Human	Adult	Pineal Gland	N/A	None
NK	Human	Adult	Pineal Gland	N/A	None
NL	Human	Fetal	Brain	N/A	None
NM	Human	Adult	Blood	Erythroleukemia TF-1	None
NN	Human	Adult	Kidney	293 embryonal carcinoma line	None
NO	Human	Adult	Brain	Substantia Nigra	None
NP	Human	Adult	Kidney	293 embryonal carcinoma line	None
NQ	Human	Adult	Blood	Erythroleukemia TF-1	None
NR	Human	Adult	Bone	RD-ES	None
NS	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
NT	Human	Adult	Brain	Corpus Callosum	None
NU	Human	Adult	Brain	Caudate Nucleus	None
NV	Human	Adult	Brain	Thalamus	None
NW	Human	Adult	Brain	Corpus Callosum	None
NX	Human	Adult	Bone	RD-ES	None
NY	Human	Adult	Brain	Substantia Nigra	None
NZ	Human	Adult	Blood	Erythroleukemia TF-1	None
O	Human	Adult	Blood	Dendritic Cells	None
P	Mouse	Fetal	Embryo	ES cell embryoid bodies	6 days post LIF
PA	Human	Adult	Bone	RD-ES	None
PB	Human	Adult	Kidney	N/A	None
PC	Human	Adult	Retina	Retinoblastoma WERI-Rb1	None
PD	Human	Fetal	Kidney	N/A	None
PE	Human	Adult	Blood	Chronic Myelogenous Leukemia K562	None
PF	Human	Adult	Thyroid	N/A	None
PG	Human	Adult	Thyroid	N/A	None
PH	Human	Adult	Colon	Adenocarcinoma Caco2	None
PI	Human	Adult	Thyroid	N/A	None
PJ	Human	Adult	Testis	Embryonal Carcinoma NT2D1	RA for 23 days
PK	Human	Fetal	Kidney	293 cell line	None

PL	Human	Fetal	Kidney	293 cell line	None
PM	Human	Fetal	Kidney	293 cell line	None
PO	Human	Adult	Placenta	26yrs., 1 specimen	None
PP	Human	Adult	Blood	LymphoblasticLeukemiaMOLT-4	None

Table 3 Cell Type and Treatment Key:

conA: concanavalin A

GCSF: granulocyte-colony stimulating factor

INF: interferon

LIF: leukemia inhibitory factor

days post LIF: cells harvested number of days shown after LIF removal

LPS: lipopolysaccharide

MLR: mixed lymphocyte reaction

PBMC: peripheral blood mononuclear cells

PHA: phytohemagglutinin

PMA: phorbol myristate acetate

RA: retinoic acid

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID

NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115,

SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81,

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46,

SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ

ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID NO:330, SEQ ID NO:331, SEQ ID NO:332, SEQ ID NO:333, SEQ ID NO:334, SEQ ID NO:335, SEQ ID NO:336, SEQ ID NO:337, SEQ ID NO:338, SEQ ID NO:339, SEQ ID NO:340, SEQ ID NO:341, SEQ ID NO:342, SEQ ID NO:343, SEQ ID NO:344, SEQ ID NO:345, SEQ ID NO:346, SEQ ID NO:347, SEQ ID NO:348, SEQ ID NO:349, SEQ ID NO:350, SEQ ID NO:351, SEQ ID NO:352, SEQ ID NO:353, SEQ ID NO:354, SEQ ID NO:355, SEQ ID NO:356, SEQ ID NO:357, SEQ ID NO:358, SEQ ID NO:359, SEQ ID NO:360, SEQ ID NO:361, SEQ ID NO:362, SEQ ID NO:363, SEQ ID NO:364, SEQ ID NO:365, SEQ ID NO:366, SEQ ID NO:367,

SEQ ID NO:368, SEQ ID NO:369, SEQ ID NO:370, SEQ ID NO:371, SEQ ID NO:372, SEQ ID NO:373, SEQ ID NO:374, SEQ ID NO:375, SEQ ID NO:376, SEQ ID NO:377, SEQ ID NO:378, SEQ ID NO:379, SEQ ID NO:380, SEQ ID NO:381, SEQ ID NO:382, SEQ ID NO:383, SEQ ID NO:384, SEQ ID NO:385, SEQ ID NO:386, SEQ ID NO:387, SEQ ID NO:388, SEQ ID NO:389, SEQ ID NO:390, SEQ ID NO:391, SEQ ID NO:392, SEQ ID NO:393, SEQ ID NO:394, SEQ ID NO:395, SEQ ID NO:396, SEQ ID NO:397, SEQ ID NO:398, SEQ ID NO:399, SEQ ID NO:400, SEQ ID NO:401, SEQ ID NO:402, SEQ ID NO:403, SEQ ID NO:404, SEQ ID NO:405, SEQ ID NO:406, SEQ ID NO:407, SEQ ID NO:408, SEQ ID NO:409, SEQ ID NO:410, SEQ ID NO:411, SEQ ID NO:412, SEQ ID NO:413, SEQ ID NO:414, SEQ ID NO:415, SEQ ID NO:416, SEQ ID NO:417, SEQ ID NO:418, SEQ ID NO:419, SEQ ID NO:420, SEQ ID NO:421, SEQ ID NO:422, SEQ ID NO:423, SEQ ID NO:424, SEQ ID NO:425, SEQ ID NO:426, SEQ ID NO:427, SEQ ID NO:428, SEQ ID NO:429, SEQ ID NO:430, SEQ ID NO:431, SEQ ID NO:432, SEQ ID NO:433, SEQ ID NO:434, SEQ ID NO:435, SEQ ID NO:436, SEQ ID NO:437, SEQ ID NO:438, SEQ ID NO:439, SEQ ID NO:440, SEQ ID NO:441, SEQ ID NO:442, SEQ ID NO:443, SEQ ID NO:444, SEQ ID NO:445, SEQ ID NO:446, SEQ ID NO:447, SEQ ID NO:448, SEQ ID NO:449, SEQ ID NO:450, SEQ ID NO:451, SEQ ID NO:452, SEQ ID NO:453, SEQ ID NO:454, SEQ ID NO:455, SEQ ID NO:456, SEQ ID NO:457, SEQ ID NO:458, SEQ ID NO:459, SEQ ID NO:460, SEQ ID NO:461, SEQ ID NO:462, SEQ ID NO:463, SEQ ID NO:464, SEQ ID NO:465, SEQ ID NO:466, SEQ ID NO:467, SEQ ID NO:468, SEQ ID NO:469, SEQ ID NO:470, SEQ ID NO:471, SEQ ID NO:472, SEQ ID NO:473, SEQ ID NO:474, SEQ ID NO:475, SEQ ID NO:476, SEQ ID NO:477, SEQ ID NO:478, SEQ ID NO:479, SEQ ID NO:480, SEQ ID NO:481, SEQ ID NO:482, SEQ ID NO:483, SEQ ID NO:484, SEQ ID NO:485, SEQ ID NO:486, SEQ ID NO:487, SEQ ID NO:488, SEQ ID NO:489, SEQ ID NO:490, SEQ ID NO:491, SEQ ID NO:492, SEQ ID NO:493, SEQ ID NO:494, SEQ ID NO:495, SEQ ID NO:496, SEQ ID NO:497, SEQ ID NO:498, SEQ ID NO:499, SEQ ID NO:500, SEQ ID NO:501, SEQ ID NO:502, SEQ ID NO:503, SEQ ID NO:504, SEQ ID NO:505, SEQ ID NO:506, SEQ ID NO:507, SEQ ID NO:508, SEQ ID NO:509, SEQ ID NO:510, SEQ ID NO:511, SEQ ID NO:512, SEQ ID NO:513, SEQ ID NO:514, SEQ ID NO:515, SEQ ID NO:516, SEQ ID NO:517, SEQ ID NO:518, SEQ ID NO:519, SEQ ID NO:520, SEQ ID NO:521, SEQ ID NO:522, SEQ ID NO:523, SEQ ID NO:524, SEQ ID NO:525, SEQ ID

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.

7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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<110> Jacobs, Kenneth
 McCoy, John M.
 LaVallie, Edward R.
 Racie, Lisa A.
 Evans, Cheryl
 Merberg, David
 Treacy, Maurice
 Bowman, Michael R.
 Genetics Institute, Inc.

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gaattcggcc ttcatggcct agacattaaa ggagaaatag acaaatctac aactatagtt 60
ggagacttca aagtaccttt ttcagtaatc aatagaccag ttagaacacc tcagccaaaa 120
atagcagaat ataaattatt ttgagctct cacagaactt tgctgagata cattataacc 180
tgggccataa aacaaacctc aaccaattaa tacagttgaa accagagtgt gctctctgac 240
cacagtagaa tcaaactatt aattagtaat ataataatga aaatctccac actcttaaaa 300
ataaacaaca tactcgag 318

```

<210> 17

<211> 314

<212> DNA

<213> Homo sapiens

<400> 17

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gaattcggcc ttcattggcct acccgccctcg gcctcccaaa gtgctgggat cacaggcatg 60
agccaccatg cccgggtcttt actttttaaact ttatctatctt ttatactata gactatttgt 120
aaataccatt aatttaattt cagttgggtat tttatgacag ctgtgttggtc aagcactgac 180
cctgtcaagt tcgtactctt tctaccttag tgtgagtcac ttaatttaag gtaggattga 240
ataattgggc tatataaaat ttgggtttctt agaacaatac attggtaatt atgaagattt 300
gcaggatact cgag 314
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<210> 18

<211> 534

<212> DNA

<213> Homo sapiens

<400> 18

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gaattcggcc ttcattggcct agtctgttca ccatcagtaa cttctactaa atgttcaacta 60
atttttaaca accttgcaca tagagagtga gatttaagtt aactgttttt gttttagaat 120
tctgtaaatg ttaaataaga gagaggcatg aaatcatttc tgataaaaat agaagttaa 180
tctgtgttaa aggggtttgt ggcccccttc tccctagctc tgtctctcag ctgaataggt 240
tgtgtcaggg agtgacaacg cagtgggtgt ttgggtgctat ctgtgttgag tgaccggcaa 300
aagaccacaa aaggaaatct ttagtttccc ctccaagtct tgttctttac atgagagcat 360
aggaagcctc cagaagactt gcattgatcc agtattgagt cctcttctat gcattctatca 420
aagaaaatga gagaatttca gaggggctgg gattatttat ttatttattt atttatttta 480
gagatgggat ttgtccatgt tgccccagcc attcttgaac cccaatact cgag 534
```

<210> 19

<211> 315

<212> DNA

<213> Homo sapiens

<400> 19

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gaattcggcc ttcattggcct acctttctaa tttttctcaa aagctaaaat ccctaaaagc 60
tgaattctgg gggaaaaaaa ttatacacag acaaaactca catagggtga tttgattatg 120
aaactaagta ttattttaat ttcagggttt ttttggtttt gttttttttg tttctgtttt 180
tgtttctgtt tttttgagaa ggagtttctc tcttggtgcc caggctggag tgcagtggcg 240
tggtctcggc tcaactgcaac ctccgcctcc caggttcaag taaatctcct acctcagcct 300
cccaagaaac tcgag 315
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<210> 20

<211> 491

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (114)

<400> 20

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tcgagatcgc accactgcac tccggcctgg gcgacagatg gagactccgt ctcncaaaaa 120
aaaaaaaaa aaaagagatg agtgaggttt ccctatgtta ccaaggctgg tcttgaactc 180
ctggcctcag gcagtcctcc cgcctcggcc tctcaaaaag cgctgggatt acaggcatga 240
gctaccagge ctggccaagt cttttgtttt tcttctcttc cttcttctt cttttctctt 300
tctttctttt ttaaaaaata gtatttagtt ttccaaacta agaccaagaa ctcttgctct 360
atataattat ttactatttc ctccatttaa ggttatatag tttttctttg aaaaaatttt 420
gtcattatca agttaaatat atacatctgt attttatgtt cttattacta ttacaactgg 480
tgtctctcga g 491
```

<210> 21

<211> 304

<212> DNA

<213> Mus musculus

<400> 21

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gaattcggcc aagtaaaagc agggagaact ctttatctga gccatgttcc tatctcctgg 60
aacgcttcta tgcacctttc tcctccccac actttttctg aggggtgacag ccagagaacc 120
agtctttgta gagaaaaacc cttttgtaca gcatatagta gaatctcaat acatggaatt 180
aagagaaaga ctttaggaagg aaaccattcc caccaatgga agaaatcaac ttgttcacag 240
aggatccacc aaacgaagaa aattcatata cagtcagcta ccgacagaca caccagagct 300
cgag 304

```

<210> 22

<211> 287

<212> DNA

<213> Mus musculus

<400> 22

```

gaattcggcc aaagaggcct attgaatcct cctctgccac gtcgatcatc tccatagttt 60
cccccatat gagagcctcc tgggtcccct cctgggccat ctggcttagg tgccttacac 120
tggttgcatc catttctcca agagaagtcc atgttctcac atgtaggatt aggacacttc 180
cagtctccag ctctgttctg tcctccacct ccaccacctc cactggggaa tcctccccgg 240
ccaccaccac cactgccacc tcctccatag cctccacggc actcgag 287

```

<210> 23

<211> 303

<212> DNA

<213> Mus musculus

<400> 23

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gaattcggcc aaagaggcct agacgtccag tagaacactg aatacaagta tactggatcc 60
aatgtcactc tgtttctgtg acaaacactg tcacaaaaag caacttagga gacaaaaggc 120
tttatttgac ttacattccc aggccattct ttttgttctg ttgtttgggt ttttttgttg 180
ttgttgttgt ttttccagga tagtcagggc tacacagaga aacctgtctt tgaaaaacta 240
ccccccccc agaaaaaaga gatgcaaac caaacaggaa aatgtacata cagcaggctc 300
gag 303

```

<210> 24

<211> 155

<212> DNA

<213> Mus musculus

<400> 24

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gaattcggct aaagaggcct acgattgaat tctagacctg cctcgagcca cactcacctc 60
acacacacct tatgagcacc ccacttgctc tccactcttc ctactcgct ctctcacctt 120
tctcttgccc cagtctttta ttgatactcc tcgag 155

```

<210> 25

<211> 401

<212> DNA

<213> Mus musculus

<400> 25

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gaattcggcc ttcattggcct atccagtatt catgccttat ccagcacacc catggccctt 60
gccattgaa gctggaagta acttttacca tggtcctttg agagcccccc gggctataag 120
ctccactttt agatcacagc agaaggctga gtggttcttt ccattcccc atcagaatac 180
aagtgttcac agcagaggtc aaaactttgc tattaaatac ctccaaccct ggagatttta 240
ttcaagggaa agattcacia gatgttcagc aactcctcag cagtatcacc cgaatggacc 300
atttgggaga tcacagagac aggtctctcc tgtacagacc catcctaaga gcaggcagat 360
gtccagaact cttgagaggt ctgggacagt ggtctctcga g 401

```

<210> 26
 <211> 495
 <212> DNA
 <213> Mus musculus

<400> 26
 gaattcggct tcatggccta cggactgttg cttcccagag gaattcacag acaccagact 60
 tgcttgcaag tcatcatgac catgagacac tgctggacag caggccccag ttcttggtgg 120
 gtccctgttt tgtatgtcca tgtcattttg gccagagcca catctgcacc tcagacaact 180
 gccactgtct taactggaag ctcaaaagac ccatgtctct cctgggtctcc agcagtccca 240
 agtaagcagt acccagcact ggatgtgata tggccagaaa aagaagtgcc actgaatgga 300
 actctgacct tgcctgttac tgcctgcagc cgcttcccct acttcagcat cctctactgg 360
 ctggggcaatg gttccttcat tgagcacctc ccaggccggc tgaaggaggg ccacacaagt 420
 cgcgagcaca ggaacacaag cacctggctg cacagggcct tgggtgctgga acaactgagc 480
 cccacccaac tcgag 495

<210> 27
 <211> 321
 <212> DNA
 <213> Mus musculus

<400> 27
 gaattcggcc ttcattggcct agattgaaat gcgcagtgtt tttgtttttt gttttgtttt 60
 gttttgtttt gttttttcca aagcaaacgg aggtcaagag cttcatgctg ctgaggagtt 120
 cctccgtcac aggttttgat ccagccattt gatgtaacta ttcttagtcc ggattccac 180
 ggagaagttg gtcggccagc ttgtaaaaat catacaacca tgggaagccgt cctcaaagtg 240
 gtccaaggtc acgttcacac ccgcactctc caagcgcttg gcgtacatga tcccatcgct 300
 ccgcaggacg tcgtgctcga g 321

<210> 28
 <211> 343
 <212> DNA
 <213> Mus musculus

<400> 28
 gaattcggcc ttcattggcct acaccacgct aagtgcacaaa aaattcctgt ggattctcct 60
 cgtcctgctt tttgaacagt atgtcactaa aacagtgtcg gtggctgctt atggagaaaa 120
 ggatgctatt ttagaggcag atactgagtt ctggatttca gtctgtgttg aattcagtgt 180
 ccagcatcag gtccagagct tgatgcatac cctccactac ctagaaaagc tgccagagga 240
 aaaggaagaa gccacctcca agacagtatc tactaagagt gaagtacaag atgaaatgtt 300
 gccagttttt aaggtggacg ctacacacaaa caagcagctc gag 343

<210> 29
 <211> 504
 <212> DNA
 <213> Mus musculus

<400> 29
 gaattcggct tcatagccta acctaaacag gctctcctct cagttatcaa ctgtggacac 60
 ttgtgcatc tctgatggct gtccctgcaag aaatctatga gtttttcct tatggggact 120
 ttggccgccg gctgcctgct tctcattgcc ctgtggggcc aggaggcaaa tgcgctgccc 180
 gtcaaacacc ggtgcaagct tgaggtgtcc aacttcagc agccatacat cgtcaaccgc 240
 acctttatgc tggccaagga ggccagcctt gcagataaca acacagatgt ccggctcatc 300
 ggggagaaac tgttccgagg agtcagtgtc aaggatcact gctacctgat gaagcaggtg 360
 ctcaacttca ccttggaaga cgttctgtc cccagtcag acaggttcca gccctacatg 420
 caggagggtg tgcttttctt gaccaaactc agcaatcagc tcagctcctg tcagatcagc 480
 ggtgacgacc agaacaaact cgag 504

<210> 30
 <211> 428

<212> DNA

<213> Mus musculus

<400> 30

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gaattcggcc ttcattggcct agtgaaatca ctggtaagga gaaaacatct gaaatggaat 60
tcaagtatct ggtcttcatt gtgctttgtc aatacctgga caatacgttt ttctcagaga 120
cagaagcaat tacaacagag cagcaatcac tgtctacttt aatcacaccg tcgttatatg 180
ttacaactga ttctcaaaac acagcagggg atgctttgag tcagacaaca agattcaaga 240
acatttcttc tggacagcaa gcatcacctg cccaaatcac tcctgaacaa gcaacaccag 300
ctgttttatgt ctcttcaagc ccacttactt ataacattac cagacaagca gaatcagcgg 360
tcaacaactc cttgcctcaa acatcaccat ctgggttcac tttgaccaat cagccatcac 420
ttctcgag                                     428

```

<210> 31

<211> 360

<212> DNA

<213> Mus musculus

<400> 31

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gaattcggcc aaagaggcct accttaaaagc cgtataactta tgaatttaaa gtggaaaatt 60
tttttggtgg ccctggcccc cttgccagat tccagctggc cgtcagtgct cgcgtgtctc 120
tctgaagagg ctctgcgggt ctgggtccctg tgcctgagct ccaggtgccg ccagacatta 180
tacaacgtga aggetgagat ctttccccct tcgggaatgg agtattgcag aacagggtcc 240
ctctgctccc tggagggttt gatcacgagg ctctcagacc tcttggagggt ggataaagat 300
gaagcactga ctgaatctga tgagcatctt tcgacaaagc ttatgtatga agttgtcgag 360

```

<210> 32

<211> 343

<212> DNA

<213> Mus musculus

<400> 32

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gaattcggcc ttcattggcct agacttaagg ttagaactac gacgactacg agaaaaacat 60
cttaaagaga ttcaggacct gcagagtcgc cagaagcatg aaattgaatc tttgtatact 120
aaactgggca aggttcccc cgtgtcatt attccccag ctgctcctct gtcggggaga 180
agaaggagac ccactaaaaa caaaggcagc aagtctagtc gcagcagctc attgggcaat 240
aaaagcccac agctttcagg caacctgtct ggtcagagtg gaacttcagt cttacacccc 300
caacagaccc tccatccgcg aggaacaccc cccgactctc gag                                     343

```

<210> 33

<211> 599

<212> DNA

<213> Mus musculus

<400> 33

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gaattcggcc ttcattggcct actttcattg tgaaatcact ggtaaggaga aaacatctga 60
aatggaattc aagtatctgg tcttcattgt gcttgggtcaa tacctggaca atacgttttt 120
ctcagagaca gaagcaatta caacagagca gcaatcactg tctactttta tcacaccgtc 180
gttatatgtt acaactgatt ctcaaaacac agcaggggaat gctttgagtc agacaacaag 240
attcaagaac atttcttctg gacagcaagc atcacctgcc caaatcactc ctgaacaagc 300
aacaccagct gtttatgtct cttcaagccc acttacttat aacattacca gacaagcaga 360
atcagcggtc aacaactcct tgcctcaaac atcacatctt gggttcactt tgaccaatca 420
gccatcacct tctacctata atttactgga acaaccacca aaacatcttg tctatacttc 480
cacacaacag ccaccatcac ctgctcctac ctcttctggg aaaaccagaa gttagagtcta 540
ctcataatca gccacaaaaa tcaacaccaa ctatttattt acaaaggagc ggactcgag 599

```

<210> 34

<211> 363

<212> DNA

<213> Mus musculus

<400> 34
 gaattcggcc ttcattggcct acgttgctct cagaggtatt ggctcatctt ctggatatgg 60
 ttttctacag cgatgaaaaa gagcgtgtta tccctttact tgtaaacatt atgcattatg 120
 ttgtacccta cctccgaaat cacagtgcac ataatgcccc tagttaccga gcctgtgtcc 180
 agctgtctcag tagtcttagt gggatcagc atacaaggag agcctggaaa aaagaagcct 240
 ttgacctttt tatggatccc agcttctttc agatggatgc ttctgtgtt agtcaactgga 300
 gagcaatcat ggacaacctg atgacacatg ataagacaac cttcagagat ttgatgactc 360
 gag 363

<210> 35
 <211> 139
 <212> DNA
 <213> Mus musculus

<400> 35
 gatgcaccag ctcttgggccc tcaatctcct ctctctgcta tctcagaacc gagtgggtga 60
 gttccacaca gaattagaac gattacctgc caaggacatc cagaccaatg tctacatcaa 120
 acacctgttt tccctcgag 139

<210> 36
 <211> 284
 <212> DNA
 <213> Mus musculus

<400> 36
 gaattcggcc ttcattggcct aggcgcgtct atttctgttc caagtgtttg cagggttttct 60
 tgggtttttt tcttatttct tcaaccagct gtttgatgtg gtctcccatg aattctattt 120
 tctcattctt cgggcatgg gctttctgta gcctcactat cctctcaatc agcatggctt 180
 tgtccacttc tgggaagtgt tccacagcca ccgaggagct ggtattctct ggagatcggg 240
 cttcagcact gattcgagca ttaagtgacc ctgatgaact cgag 284

<210> 37
 <211> 494
 <212> DNA
 <213> Mus musculus

<400> 37
 gaattcggcc ttcattggcct aagtttattg aggtattaaa tttactttgc agtggatatt 60
 tttaaatata cacctgagct gacgtgtttt taactgagtt tttttgtttt ttttttttaa 120
 tgctactcat ttggattgct cttttaataa actcttcttg tataggaaatg aaatcaccag 180
 gagaacagct ggtgtgcctg ccaccagtgg aggcctttcc taatgatccc cgggtcatca 240
 atagagaaaag aagctgtgat taccagttcc caccctctcc gcctacagac accctaaaag 300
 ggactaccga ggaggacact gtaacagcag gtcaggcgat ggcagtggaa gagcagtgtg 360
 tgccagcagc agagcttctt agagtgcgcg agattacaga aaatacagtg ttaggagagt 420
 tccatctttt ctctaggaag gtagaagaga ttttgaagga gaagaatgtt tcatatgtta 480
 gtgcaaatct cgag 494

<210> 38
 <211> 317
 <212> DNA
 <213> Mus musculus

<400> 38
 gaattcggcc ttcattggcct actcctatga cagcatctga aatatataat aattctctcc 60
 ttttagaata tctctgttgg ctcaaatagc tattttctaaa ttttctgtct aatcgtttta 120
 acttgtcagt tgtttttatt aaacttatgt tccatgtaca gtgctgccag gttcctgccc 180
 aggagtcagt cagaggagca tggcttttcc ttctgggttc attagctttg ctgttagcca 240
 acaccaacac tcatttcacg atggcttttg tcttctgcca agtggtcccc tgtgccccag 300
 catcacaagc actcgag 317

<210> 39
 <211> 362
 <212> DNA
 <213> Mus musculus

<400> 39
 gaattcggcc ttcattggcct aaggaagtaa caattttgcc ttttcttctgt gttcttttaa 60
 ctgcttatta gaatttcata tctaatttct ctctgatttt ggaaaagctt ataaacaaag 120
 atttatcaga aaaaagtctc agaatttctg aaaaaaata gtaaaagaaa aggggataga 180
 gacaaatgat tctcttttta ttaatttatt tattcacttt atacctgat cgaagccctc 240
 ctctcccgag tcccactccc cctagtccat ctctccagta ctctctctgt tctcagagaa 300
 ggggaagtct cctaggggta ccagtatgcc cagcaggggg atccaaaggc agtatactcg 362
 ag

<210> 40
 <211> 318
 <212> DNA
 <213> Mus musculus

<400> 40
 gaattcggcc ttcattggcct aaagaaacct ggataacatt gtcttgcaac agcctagtaa 60
 taggtagcaa aaggaaatct aagaaagatg tttatacaat ctttgatgca gaggtggaga 120
 gcacaagtcc aaagtcggaa caggattcgg gaattctgga tgtggaagac gaggaagatg 180
 atgaagaggt acctggggct caagacttgg tggatttctc tcctgtgtat cgggtgtctac 240
 acatatattc tgtcctgggt gcccgtagaa catttgagaa ttactaccga aaacagaggc 300
 gaaaacaggc ccctcgag 318

<210> 41
 <211> 556
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (151)..(152)

<400> 41
 gaattcggcc aaagaggcct agaagaagat ttactggaaa ttaagaactt gctgctgtta 60
 aataaaaactt tgtatattgt cagcctgcag gagataacat tttagtcaaa aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa nnaaggaacc attttgacag caagaccttc 180
 tgtgaagtcc taaaaaggga aaggatctgc gtgtgtcttg tcatttaaac acatatcag 240
 ttctgtgtac tctagagttt gacggctctgt atatttttca ggcagccaag ccaagttatt 300
 gtatcatttg ggtgtagaaa ctgtgttttc ctgtgtatat gtgatcaata tccaaggggc 360
 taaaagttag cttgcttgta ttggaattta aaacaacaac aacaaaaaga aatatgtcac 420
 tgtgttttca atttgtattt tcacaactgc ttccctttct atggctcctg ttcatatctc 480
 acagtgtgta gggatcatag agaacacgca gagccgcaag ctgtctgtca catccagctt 540
 ccgcagttca gtcgag 556

<210> 42
 <211> 304
 <212> DNA
 <213> Mus musculus

<400> 42
 gaattcggcc ttcattggcct aggttttctg ggctactacg atggcgatga gtttcgagtg 60
 gccgtggcag taccgcttcc cgccttctt tacgttacag ccgaacgtgg acaccggca 120
 gaagcagctg gccgcctggt gctctctggt tctgtccttc tgccgcctgc acaaacagtc 180
 cagcatgacg gtgatggaag cccaggagag cccgcttttc aacaacgtca agctacagcg 240
 gaaacttcct gtggagtcac ttcagattgt attagaagaa ctgagaaaga aagggaacct 300
 cgag 304

<210> 43
 <211> 323
 <212> DNA
 <213> Mus musculus

<400> 43
 gaattcggcc ttcattggcct agtccttcct ctgcagacca tcgctgggcc ggctgccctc 60
 ccctcctctc cctctctctt ggggttgggg cagtgggaag gaggggacct cccatgcccc 120
 aggatcccca gcgccagggg acagtgccca gggggcctgg ggtcccggag ggagtcctgg 180
 gatctgaagg gcatttcgatt gtgagcgccc aggcagaggg gcagaggcgg ctgtacacag 240
 gctcagaaag gaaagacttg atgtcctcct gagggcagca gaggagcgcc gagccgcctg 300
 tcacttcccc ctccacactc gag 323

<210> 44
 <211> 322
 <212> DNA
 <213> Mus musculus

<400> 44
 gaattcggcc ttcattggcct agattgaaat gcgcagtggt tttgtttttt gttttgtttt 60
 gttttgtttt gttttttcca aagcaaacgg aggtcaagag cttcatgcgt ctgaggagtt 120
 tcttcctgta cagggttttga tccagccatt tgatgtaact attcctagtc cggattccca 180
 cggagaagtt ggtcggccag cttgtaaaaa tcatacaacc atggaagccg tcctcaaagt 240
 ggtccaaggt cacgttcaca cccgcactct ccaagcgctt ggcgtacatg atcccatcgt 300
 cccgcaggac gtcgtgctcg ag 322

<210> 45
 <211> 451
 <212> DNA
 <213> Mus musculus

<400> 45
 gaattcggcc ttcattggcct acatgtcttc actagctcct ctccctcagcc ttcttctcct 60
 ctgtgtctct gattctaggg cagaaacaac tgtgaccag tctccagcat ccctgtccgt 120
 ggctacagga gaaaaagtca ctatcagatg cataaccagc actgatattg atgatgatat 180
 gaactggtac cagcagaagc caggggaacc tcctaagctc cttatttcag aaggcaatac 240
 tcttcgtcct ggagtcccat cccgattctc cagcagtggc tatggcacag attttgtttt 300
 tacaattgaa aacacgctct cagaagatgt tgcagattac tactgtttgc aaagtgataa 360
 catgccgtac acgttcggag gggggaccaa gctggaaata aaacgggctg atgctgcacc 420
 aactgtatcc atcttccac caccactcga g 451

<210> 46
 <211> 350
 <212> DNA
 <213> Mus musculus

<400> 46
 gaattcggcc aaagaggcct agagctttca tatccacgat gcgttttctg gccgccacga 60
 tcctgctgct ggcgctggtc gctgccagcc aggcggagcc cctgcacttc aaggactgcg 120
 gctctaagggt gggagttata aaggaggtga atgtgagccc atgtcccacc gatccctgtc 180
 agctgcacaa aggccagtcc tacagtgtca acatcacctt taccagcggc actcagtcctc 240
 agaacagcac ggccttggtc caccgcatcc tggaagggat cgggtcccc ttccttatcc 300
 ctgagcctga cggttgtaag agtggaatca actgccccat caatgtcagag 350

<210> 47
 <211> 449
 <212> DNA
 <213> Mus musculus

<400> 47

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gcttcatggc ctacaaagac aaaatggatt ttcaagtgca gattttcagc ttcctgctaa 60
tcagtgtctc agtcataatg tccagaggac aaattgttct ctcccagtct ccagcaatcc 120
tgtctgcac tccaggggag aaggtcacaa tgacttgagc ggccagctca agtctaagtt 180
acatgcactg gtaccagcag aagccaggat cctcccccaa accctggatt tatgccacat 240
ccaacctggc ttctggagtc cctgctcgtc tcagtggcag tgggtctggg acctcttact 300
ctctcacaat cagcagagtg gaggtgaag atgctgccac ttattactgc cagcagtggg 360
gtagtaaccc gtggacgttc ggtggaggca ccaagctgga aatcaaacgg gctgatgctg 420
caccaactgt atccatcttc ccactcgag 449

```

<210> 48
 <211> 555
 <212> DNA
 <213> Mus musculus

```

<400> 48
gaattcaagt atctgtgctt cattgtgctt tgtcaatacc tggacaatac gtttttctca 60
gagacagaag caattacaac agagcagcaa tcactgtcta ctttaatcac accgtcgta 120
tatgttacaa ctgattctca aaacacagca gggaatgctt tgagtcagac aacaagattc 180
aagaacattt cttctggaca gcaagcatca cctgccccaa tcactcctga acaagcaaca 240
ccagctgttt atgtctcttc aacccactt acttataaca ttaccagaca agcagaatca 300
gcggctcaaa actccttgcc tcaaacaatc caatctgggt tcactttgac caatcagcca 360
tcaccttcta cctataatc tactggacaa ccacaaaac atcttgtcta tacttcaca 420
caacagccac catcacctgc tcctacctct tctggaaaac cagaagtaga gtctactcat 480
aatcagccca caaatcaac accaactatt tatttataaa gggacacacc accaccacca 540
ccacccaac tcgag 555

```

<210> 49
 <211> 328
 <212> DNA
 <213> Mus musculus

```

<400> 49
gaattcggcc ttcattggcct acatgtcttc actagctcct ctctcagcc ttcttctcct 60
ctgtgtctct gattctaggg cagaaacaac tgtgaccag tctccagcat cctgtccgt 120
ggctacagga gaaaaagtca ctatcagatg cataaccagc actgatattg atgatgatat 180
gaactggtac cagcagaagc caggggaacc tcctaagctc cttatttcag aaggcaatac 240
tcttcgtcct ggagtcccat cccgattctc cagcagtggc tatggcacag attttgtttt 300
tacaattgaa aacacgctct ctctcgag 328

```

<210> 50
 <211> 304
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (143)

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<400> 50
gactctaaag atgaaatgta aattcctggg tagcttcttt ctgctcttca gcctttccgg 60
caaaggggag gactgcagag acaatgagac catctggggt gtcttgggtc atggcatcac 120
cctgaacatc cccaactttc aantgactga tgatattgat gaggtgcgat gggtaaggag 180
gggcacctg gtcgcagagt ttaaaaggaa gaagccacct tttttgatat cagaaacgta 240
tgaggcttta gcaaacggat ccctgaagat aaagaagccg atgatgagaa acgacatcct 300
cgag 304

```

<210> 51
 <211> 436
 <212> DNA
 <213> Mus musculus

<400> 51
gaattcggcc ttcatgccta aaaataattg gtccctgcct gagctagtgc acgccgtggt 60
cctcttggct cactatcacg ctttggccag ctttgttttt ggtagtggca tcaatccaga 120
gagagaccca ggaatcgcca atgggttcag actaatctct gtgagcagct tctgtgtgtg 180
tgacctggcc aatgacaaca gcatcgagaa cacctccctg gcgggcagca actttgggat 240
tgttgattcc ctaggcgagc tgggaagcctt aatggaaagg atgaaaaggc ttcaggaaga 300
cagggaagat gacgagaçca ctcggaaga aatgaccacg cgtttttgaga aggaaaagaa 360
agaaagtctc tttgtggtcc ctggagaaac tttacatgcg tttcctcact cagattttga 420
agatgatgtt ctcgag 436

<210> 52
<211> 285
<212> DNA
<213> Mus musculus

<400> 52
gaattcggcc ttcatggcct acggctagga agggcataga tttttagaga tgggctagtt 60
gggttccgaa cctggctgca taattttatc ggggtggaat ttaggcggat cgcattttta 120
atgcctgaaa atgggcacag cagtgtgtgt taacattgaa tctgagatgt cacctaggga 180
aagacacatt ccgatttgaa agatagtcga taggaaagaa aacaagccat ggtcatgggc 240
aagtgcctcc cccgaagagt tatgttaaag atgaaatggc tcgag 285

<210> 53
<211> 448
<212> DNA
<213> Mus musculus

<400> 53
gaattcggcc ttcatgccta gggagacacg gaagagacaa attttgatct ttttaaata 60
gctcttagtt tctagagtct ttgggtttcg atggtttcct aaaactctac cttgtgaagt 120
taaagtaaat atcccagagg cccatgtgat cgtggactgc acagacaagc atttgacaga 180
aatccctgag ggcattccca ctaacaccac caatcttacc cttaccatca accacatacc 240
aagcatctct ccagattcct tccgtaggct gaaccatctg gaagaaatcg atttaagatg 300
caattgtgta cctgttctac tggggtccaa agccaatgtg tgtaccaaga ggctgcagat 360
tagacctgga agcttttagt gactctctga cttaaaagcc ctttacctgg atggaaacca 420
acttctggag ataccacagg gactcgag 448

<210> 54
<211> 449
<212> DNA
<213> Mus musculus

<400> 54
gaattcggcc ttcatgccta gggagacacg gaagagacaa attttgatct ttttaaata 60
gctcttagtt tctagagtct ttgggtttcg atggtttcct aaaactctac cttgtgaagt 120
taaagtaaat atcccagagg cccatgtgat cgtggactgc acagacaagc atttgacaga 180
aatccctgag ggcattccca ctaacaccac caatcttacc cttaccatca accacatacc 240
aagcatctct ccagattcct tccgtaggct gaaccatctg gaagaaatcg atttaagatg 300
caattgtgta cctgttctac tggggtccaa agccaatgtg tgtaccaaga ggctgcagat 360
tagacctgga agctttaagt ggactctctg acttaaaagc cctttacctg gatggaaacc 420
aacttctgga gataccacag ggactcgag 449

<210> 55
<211> 476
<212> DNA
<213> Mus musculus

<400> 55
gaattcggcc ttcatggcct agccggggcc ttcatgagac tctccagctg aagccatctc 60
ctgcttggga gccagtgtcc cattttctgt cgtggcatca tcatcacagt gcctcagaga 120

```

gtggagttcc caggatgccc acttgagctg gttctctaca gcatccagct cagaactcgg 180
taatccctga gcatcttctt gagatgttat ctctcttaca agcacttccc gtttctgccg 240
acggagagaa accggctgac cagggtcatc aagctcactc tccaagtcct ctagaacagc 300
cactgcctcc tctccattct ctgggtgatg ctctcgaacc caagtctgta gctccttggg 360
taggatggca acaaactgct ccaaaactac cagctccagt atctgctcct ttgtgtgtgt 420
ctctggtctg agccacaggc ggcaaagttc tcggagctgg ctcaccgcct ctcgag 476

```

<210> 56

<211> 393

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (57)..(58)

<220>

<221> unsure

<222> (226)

<400> 56

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gaattcggcc ttcattggcct atgcagattt aatggaacta gggaaatcct tatccanntc 60
caaaacctca ttaacttctc taaggaggc tcacccttcg aaatcagcgg gaacaagact 120
tccaatctct gcaacaggat ggactgtgta aacctctgga gaaaagggtc tgcacctttg 180
tggataactt aaagcatgcg agggagttat tgcctaaggt gaggnacgt ctagaagaca 240
ggccaaaggg aaatgggaca gggtcagcct gtgtggatta cagttattgc aactctgtct 300
ggattcttgg gcctggtcct actcattgtg atatgcaagc tctatgttgt taaccctctg 360
atggattcat caaggaccag gtcaccactc gag 393

```

<210> 57

<211> 484

<212> DNA

<213> Mus musculus

<400> 57

```

gaattcggcc ttcattggcct ataggccatg aaggccggcc ttcattggcct aagtctctcc 60
ccctttactc cctccacact ttttccagac ctgccctcct cttagaaaag aacagtcctc 120
cctcctgggc acatgaatgg aatatgctat aacaagctat agtaagacca ggcacacatt 180
ctcacatcaa ggctagacca ggaggcaaaag cattccaaag gcaccagatg actcagggac 240
agcctgtgct cccactgtta gcaccctaca agaaccacaa gctatacaac cgtaacatac 300
atgcagtgtc cagacacata taggctcacc atcacaagaa catggcccac agaatcatct 360
gaggcacatt ttacctaaca gttggtacag atgacttggg cagtgtcttt tggtagatat 420
tgaagacaca aagatgcatg ctctctctcc acccttaccg attgaattct agacctgcct 480
cgag 484

```

<210> 58

<211> 554

<212> DNA

<213> Mus musculus

<400> 58

```

gaattcggcc ttcattggcct actataagtt aagcttcttc agcgggatgc tgctgtcctc 60
atgcatcagc attgaccgct acgtagccat cgtccaggcc gtgtcggctc atcgccaccg 120
cgcccgcgtg ctctcatca gcaagctgtc ctgtgtgggc atctggatgc tggccctctt 180
cctctccatc cggagctgc tctacagcgg cctccagaag aacagcggcg aggacacgct 240
gagatgctca ctggtcagtg cccaagtggg ggcttgatc accatccaag tggccagat 300
ggtttttggg ttctagtgc ctatgctggc tatgagttct gctactcatt atcatccgta 360
ccttgctcca ggcacgcaac tttagcggg acaaggccat caaggatgc attgccgtgg 420
tggtagtctt catagtcttc cagctgccct acaatggggg ggtcctggct cagacggtgg 480
ccaacttcaa catcaccaat agcagctgcy aaaccagcaa gcagctcaac attgcctatg 540

```

acgtacacct cgag

554

<210> 59

<211> 322

<212> DNA

<213> Mus musculus

<400> 59

```

gaattcggcc ttcattggcct agattgaaat ggcagtggtt tttgtttttt gttttgtttt 60
gttttggttt gttttttcca aagcaaacgg aggtcaagag cttcatgcgt ctgaggagtt 120
tcctcgcgtca cagggttttga tccagccatt tgatgtaact attcctagtc cggattccca 180
cggagaagtt ggtcggccag cttgtaaaaa tcatacaacc atggaagccg tcctcaaagt 240
ggtccaaggt cacgttcaca cccgcactct ccaagcgctt ggcgtacatg atcccatcgt 300
cccgcaggac gtcgtgctcg ag                                     322

```

<210> 60

<211> 390

<212> DNA

<213> Mus musculus

<400> 60

```

gaattcggcc ttcattggcct agctgtagat gtttcttcta gagcacctat tttctgttcc 60
tcccctcata ctttttttaa aactttaaaa aagtgcattg gtgtttgcct gcatgaatgt 120
ctgtgctcca tttgcatgat tgggtgcctt ggaaggcgga agaagggtgc agacctcctg 180
gaattgaaat tgtagacagt tgtgatctgc catgtgggtg ctgggaatca aacctgggtc 240
ctatgaaaag tatccagtgt tcttattctt aactgctgaa ctatatcttc agccgtcctc 300
ccacactggt ttagtgagat gatggttaata ggaagatttg ttgctctgtt ttgttttgtt 360
ttgttttgtt ttcctagtgc gggactcgag                                     390

```

<210> 61

<211> 483

<212> DNA

<213> Mus musculus

<400> 61

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gaattcggct tcatggccta catgctgatg ctcatgctcc tgatgatgtt cgcgggtccac 60
tgcacgtggg tcacaagcaa cgcctactcc agtccaagtg tggctccttg ctcctacaat 120
catgatggta ccaggaatat attagatgat tttagagaag cgtacttttg gctgagacaa 180
aacacggatg aacacgcccg ggtcatgtcg tgggtgggact acggctatca gattgctggc 240
atggccaaca ggaccactct ggtggataac aacacctgga acaacagcca catcgactg 300
gtcggaaaag ctatgtcttc caatgaaacg gccgcctata aaatcatgag gtcccttgat 360
gtcgattatg tgttggttat tttcggagga gtgattggct attccgggga cgatatcaac 420
aagttcctct ggatggtcag gatagctgaa ggggagcatc ccaaagacat ccggcagctc 480
gag                                     483

```

<210> 62

<211> 189

<212> DNA

<213> Mus musculus

<400> 62

```

gaattcggcc ttcattggcct agggcgggtt taagaaatgc tgttcctact cactccaaag 60
aaccctgggc acttaatcaa tgccaccctt ttcttagtgt attcatttat tttcccacgc 120
gtgatgggat tctataccct gcaaaccaat cctaagagaa gcttggaag ggatgaggaa 180
aaactcgag                                     189

```

<210> 63

<211> 456

<212> DNA

<213> Mus musculus

<400> 63
 gaattcggcc ttcattggcct aagcttcgga ataataattt tggcaaattct atcttctgaa 60
 ccactcattt ctgtggtctt aatggctcca atttggggac caataatgtt cattgtctca 120
 ggatccctgt caattgcagc aggagtgaac cctacaaaaa gcctgatcat cagcagtcta 180
 actctgaaca ctatcacctc tgtgttggct gcaactgcaa gcataatggg ttagtgcagt 240
 gtggctgtgg gttcacagtt tccgtttcgg tataattata caatcaccaa gggtttggat 300
 attttgatgt taattttaaa tatgctagaa ttctgcattg ctgtgtccat ctctgctttt 360
 ggatgtaaag cttctgttg taactccagc gaggttctt tagtgctacc atcaaattcct 420
 gctgtgactg tgatggcacc cctgtgtca ctcgag 456

<210> 64
 <211> 330
 <212> DNA
 <213> Mus musculus

<400> 64
 gaattcgcct tcatggccta cctgcttaga cacgcttggt ctgaaggcct tgcccttgc 60
 caccagtag gttttcagga tcaattccgt cagcagcttc ctcttctga gctcattccg 120
 ttcttttca gccagcttct cagcctggcc tgcttgacc agctgcaacc gcttctgcac 180
 ttcattctct atactgtcca cactcggaa caccggggc ccgtcggcg cactcttgc 240
 cactcggatc cacttggttg acatggcctt gctgaagccc accttgccgc tgggcaggtg 300
 catgagctca ctctgcacca ggcctcgag 330

<210> 65
 <211> 358
 <212> DNA
 <213> Mus musculus

<400> 65
 gaattcggcc ttcattggcct acaagaagga cgagcccaag agcagcgagg aggcgctcat 60
 cgtccctccg gatgccgtgg cgggtgattg caaggaccgg ggtgacgtgg ttccggttgg 120
 acagaggaga gcgtgggtgt ggtgcagtgt ttccggactg gccttcacgc ttgctggcgt 180
 catcctcgga ggggcgtacc tgtacaagta ttttgcctt cagccagatg atgtgtacta 240
 ctgtggacta aagtacatca aagatgacgt catcctgaac gagccttctg cggatgcccc 300
 agctgctcgc taccagacaa ttgaagagaa catlaagatc tttgagcaag aactcgag 358

<210> 66
 <211> 451
 <212> DNA
 <213> Mus musculus

<400> 66
 gaattcggcc ttcattggcct accagatctt ccggagcacc aaactcagtg acagcctgag 60
 cgctgcgcag aagaacaagg tgaagcgtc cgcacatcgc gtcgtcacca tcttctggt 120
 ctgctttgct cctaccacg tggtaactct cgtcaaagct gccagctttt ccttctacca 180
 aggagacatg gatgccgtgt gtgcctttga aagcagactg tacacagtct ctatggtgtt 240
 tctgtgcttg tctacagtca acagtgtggc tgaccccatc atctacgtgc tgggtacaga 300
 ccactctcgg caagaagtgt ccagaatcca cacagggttg aaaaagtgtt ccacaaagac 360
 atatgtttaca tgcctcaaagg actctgagga gacacacttg cccacagagc tttcaaacac 420
 atacaccttc cccaatccca cgcattctga g 451

<210> 67
 <211> 349
 <212> DNA
 <213> Mus musculus

<400> 67
 gaattcggcc ttcattggcct acacaatgtc gggtctctcc cgccgactgc tctgggccc 60
 cactgcctc gccgtgtct gcgtctcggc cgcgcagccc aacatcacca ccctggctcc 120
 caacgtgacc gaggtgccga ccacgaccac caaagtggc ccgacgacgc aaatgcccac 180

cgtgctacca gaaacctgtg cgagcttcaa cagctgtgtt tcctgtgtta atgccacctt 240
 tactaataat attacctgct tttggttaca ttgccaagaa gcaaataaga cctattgtgc 300
 aatgaacca ttaagtaatt gttcccaggt gaaccgcact actctcgag 349

<210> 68
 <211> 304
 <212> DNA
 <213> Mus musculus

<400> 68
 gaattcggcc ttcattggcct agtttgacct ggctggaata acgtgtgggc acttccttga 60
 acctttcttg accttctttg gtgcaaccct gattgggaaa gcaatcatta aaatgcatat 120
 ccagaaaata tttgttatag taactttcag caagcacatc gtggagcaga tggtgacttt 180
 cattggtgct gtccccggca taggtccgtc tctgcagaag cctttttcaag agtacctgga 240
 ggcgcagcgg cagaagcttc atcacagaag tgaagcgggc acaccgcagg gagaaactct 300
 cgag 304

<210> 69
 <211> 646
 <212> DNA
 <213> Mus musculus

<400> 69
 gaattcggcc ttcattggcct agctagttaa taggtgttta ttaaagatgc agattttaat 60
 tagttacca gtttgaccct aatcatacat atagtattat gattcagttt gtgatttttg 120
 ttttatgttc ttatgatggc ttataataga ttttttgaga tcagttttta ttcttctttt 180
 tgaaataact ggggtatttaa atttaaagtt ttctttttta aataattatg tgcagtgtct 240
 cactattgat gtagctggac aaagctggct atgagtgcga cgggaaacac agtagtgtcc 300
 tgaagtgcct ggctgccctg cgtactgtat tttagaattc agacattgtc catgatcaga 360
 agtccctgaa gacggcactt cccagtaatc actccagagt gctcagtggg tgtcccctgc 420
 gcgtctacac tcttggtctt ttgagttaga ggcacaaac tttattccct ttctagctct 480
 ggctcttga acctcatgaa gatttgacac cttttgcgtt gctccgttgc cagcccccat 540
 cgttctact gtcttgctgt gcctagagca gtggcaggcc aggcgtccag gctgcttcca 600
 cccactgcag gcaccctaga gagggagctg ggagaagcag ctcgag 646

<210> 70
 <211> 304
 <212> DNA
 <213> Mus musculus

<400> 70
 gaattcggcc ttcattggcct acaaaacctt tccccagag cccatgtata gaccagatt 60
 tgctatgcaa atagtccaga ttcagttatg gctggctaca ttattcagta acttcccaac 120
 aggtagcaca aatattcctt atggaaaaag cccaggactg ttcagtagtt cctcctgtac 180
 ttttctgctg gctacagtat ggagtgcctt atgggcacag gccagccgg agaacagaac 240
 ggagggctct ggaagaggc agctcactgg agagcctaca ttccttacac aagtgccact 300
 cgag 304

<210> 71
 <211> 474
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (20)

<400> 71
 gaattcggcc aaagaggccn acgaagattg ccaagatttt agagatgtat ttgtcaaaga 60
 ttctgtcga tccatgcctt gtgggtgaca gtgtcctctg tgatgcagcc ctacctttc 120

```

gtgtggggac attatgatgt atgtaagagc ctgatttaca cagaagaagc caaagtttgg 180
gattacacag cctgccagcc ggaatccacg gacatgacca agtatctgaa agtgaaactg 240
gaccctccgg atattacctg tggagaccct ccagagtcct tctgtgcaat gggcaaccct 300
tacatgtgca ataatgagtg tgatgcgagt acccctgaac tggcacaccc tcctgagctg 360
atgtttgatt ttgaaggaag acatccctcc acattttggc agtctgctac ttggaaggag 420
taccctaaac ctctccaggt taacatcact ctgtcttgga gcaaaaccct cgag 474

```

<210> 72

<211> 536

<212> DNA

<213> Mus musculus

<400> 72

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gaattcggcc aaagaggcct acttgatcct tgtgcctcag cttcccaagt tctaagataa 60
cagacatggt ccatcatgcg cagttccttt ctttgctata gtatatatcc tcacatgta 120
cacataatgc tatctgtgat ggtttatata tgcttggtc agggagtggc actgttatga 180
ggtgtaacct ctttcaacaa ggtgataaag atgaaatggg gtattactgt gctcactgga 240
cacactgttc agcccccac tcaccgtaac catgggaaca ctgacagact ttctgtggtc 300
tcctctgcaa aggctgtgcc cagttttgtt atcgggctat tggtttaagg tcacacctc 360
agctcataga gctgtcacca ctgcctacat gtgatactgt aaacccatct cctacggaac 420
cagagaagtt gagagaccac agagagtgtc tggtagctga ctgagtatac tggacatctg 480
tgtcaaaatg caaaaacaat gaagatgagc cacctggagc cagggagcat ctcgag 536

```

<210> 73

<211> 384

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (31)

<220>

<221> unsure

<222> (100)

<220>

<221> unsure

<222> (103)

<220>

<221> unsure

<222> (138)

<400> 73

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gaattcggcg aaagaggcct agacgccttg nagtccgctc tgccatcctt taaaccgcag 60
acctaacttc ataaaaagaa aaaaaaagga aaaaaaaan gnaaaaaaa aaaaaaaagc 120
caagttaacc tggaaattnt tttttgtaca tttgagccca cagggataac attgtttcaa 180
taccaaagtg tttggttcac ttttgagaag ctggaagctt gctctcatgc tcaccactag 240
ctttatcccc agcaaaactc ctctccagac aggcagccgc attctcagca tggggaaccg 300
gtgggggtgc acgggggtgc tatgctgttt ctataaagac tgcacacacg caatcgtgtg 360
tggcattttt ttggtaaact cgag 384

```

<210> 74

<211> 422

<212> DNA

<213> Mus musculus

<400> 74

```

gaattcggcc aaagaggcct actaccttca taaacattta gattgtctgt gactcagcta 60

```

```

ggatgatatc tgcctacct gcatttagcc aggtagttta acctaagaga agaccttgtg 120
taaaactaaa gatttaagta tgtacgcac agatgtttta ggattgcagt tgacaatttc 180
tgtaacctag gccttcagaa gttagaactg cagttgacgg acggaagctt gagggttttc 240
tgagatggac tacatttctt catttccatg tctaattgtt gttctctaag atgtcctctg 300
ctttcaaata ttggctccta tattgagtgg tagtctcagg aggtagaggc aggaggatct 360
cttgagtttg cccccaacct tagtctacag agcaagttcc aggatatctc gaggttctcg 420
ag 422

```

<210> 75

<211> 388

<212> DNA

<213> Mus musculus

<400> 75

```

gaattcggcc aaagaggcct acaatccaca agggtccttt cttccgagtc agggaggaag 60
ctatcctgtg gattctcata gacaccaga ccacttcatt caccctctt tctcccatgc 120
tggggctcag acctaggaca gcatgtattc taggcàagca ttcaaccact gagctaaatc 180
tcctgccatc cttctaataa cagggaggaa gggagaaata gtccaggaaa ccgggtatct 240
atcacgtggg tggcttactt caacgcttag aagtttggag tgtaggattc agtagttatt 300
ttctaggttg ggtgactgag gtccagaagg cttaaatgac cagggttaca caggcaggaa 360
gaggcacaca aatacactgg cactcgag 388

```

<210> 76

<211> 525

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (493)

<400> 76

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gaattcggcc aaagaggcct acacagattt ctcttggagt cagttggtcc cagaaagatc 60
caaattatga gactgtcagc aagaattatt tggcttatat tatggactgt ttgtgcagca 120
gaagattgta aaggtcctcc tccaagagaa aattcagaaa ttctctcagg ctctgtgtca 180
gaacaactat atccagaagg caccaggtt acctacaaat gccgccctgg ataccgaaca 240
cttggcacta ttgtaaaagt atgcaagaat ggaaaatggg tggcgtctaa cccatccagg 300
atatgtcgga aaaagccttg tgggcatccc ggagacacac cctttgggtc ctttaggctg 360
gcagttggat ctcaatttga gtttggtgca aaggttgttt atacctgtga tgatgggtat 420
caactattag gtgaaattga ttaccgtgaa tgtggtgcag atgggtggat caatgatatt 480
ccactatgtg aanttgtgaa gtgtctacct gtgacagaac tcgag 525

```

<210> 77

<211> 263

<212> DNA

<213> Mus musculus

<400> 77

```

gaattcggcc aaagaggcct atgcattttc agttaatttt tggagagtgc atatgtatac 60
acattaatcg tctgtatact ccatactatt aatcttttag ctctatttat tttccaaag 120
tcagactgtc ttgatagcaa tatagttagt tttaaagtca gctagtacaa gaattctaga 180
tgtattctcc ttcttttgta ttatattggc tatttttggg actcctgtct gcttccctca 240
ttgtatctcc aacacatctc gag 263

```

<210> 78

<211> 437

<212> DNA

<213> Mus musculus

<400> 78

```

gaattcggcc aaagaggcct agaaagatgt atcatggaat gaacccgagc aatggagatg 60
gattttctaga gcagcagctg cagcaacagc agcctcagtc cccccagaga ctcttggccg 120
tgatcctgtg gtttcaactg gcgctgtgct ttggccctgc acagctcacg ggtgggttcg 180
atgacctcaa cgtgtgtgct gacccaggcg tcccagagaa tggcttcagg acccccagcg 240
gaggagtttt cttcgaagc tcaagtaacc gatttcaactg ccaagacgga ttcaggctga 300
agggctctac aaagaggctg tgtatgaaac attttaatgg gaccctaggc tgggtcccaa 360
gtgacaaacc tgtctgcata caagaagact gccgcatccc ccaaattgaa gatgctgaga 420
ttcgaacaaa cctcgag 437

```

<210> 79

<211> 456

<212> DNA

<213> Mus musculus

<400> 79

```

gggggtcggt atcattgctt ggctgttatt attaccgttg ttatttttatt tttatttttt 60
aaacctaaagg gagaaagaca catacacaca aaactgtggg atttatttaa catgatcttg 120
gcaaacgcct tctgcctctt cttcttttta gacgaaaccc tccgctcttt ggccagccct 180
tcctctccgc agggctctga gctccacggc tggcgccccc aagtggactg tctccgggcc 240
aatgagctgt gtgcggctga atccaactgc agctccaggc accgcacctt tcggcagctg 300
ctggcaggcg gggatcgcaa taccatgctg gccataaagg agtgccaggc ggccctggag 360
gtcttgcagg aaagccatt gtatgactgc cgctgcaagc ggggcatgaa gaaggagctg 420
cagtgtctgc agatctattg gagcatctac ctcgag 456

```

<210> 80

<211> 574

<212> DNA

<213> Mus musculus

<400> 80

```

gaattcggcc aaagaggcct acagtgatct agtgatgtca tccagtatga tccatctggt 60
gtcctctgtc atccccagca cccattttga ctcatcttct tccttgactg caaatcaaaa 120
cagtcacatcc tttccagctg gaaagccaag ccttctcacc tctcccagtc tgggtcccctc 180
agcacagtct agcgttttct ctacaggagc acctaccagc tctctggaac tccagtctgg 240
aagtcgtttg gatttccat ccggctttta ctccactccg cccctggact tcagcactcc 300
agccctttca cggtcagacg agcttgcttt cccatctttg atgtcaagcg atccatcaac 360
cttcttttct caaacttttt ccaccatggc tgagacattt tcaactgtcca actctatgaa 420
tttgcaatca cctcagcttt ctgttcttaa tcccacaagt ctagagccgt ctcagccaca 480
gtcaagtgcg gaccttcttt tgaacacagt cactgttctt cctagtcccc ccgagaggcc 540
cccactttca agtccccctt ctgactctct cgag 574

```

<210> 81

<211> 384

<212> DNA

<213> Mus musculus

<400> 81

```

gaattcggcc aaagaggcct gcctatggct attcctgacc cttcaccctt caccttgatg 60
cagccagtag ctggatcctt gaggtcacgt tgcataatcg tttcaaggta accatgggtg 120
caaggctcctg tgggttgac cagaaaaggc catcaatttt ccccttgctt gtaatttaac 180
attaaaacca tagctaagat gttttatata tagcacctat gcagagtaaa caaaccagta 240
tgggtatagt atgtttgata ccagtgtctg gtgggaatgt aggaagtcgg atgaaaagca 300
agcctttgta ggaagtgtgt ggggtgggat tgcaaaaatt ctctgctaag actttttcag 360
gtggacataa cagacatact cgag 384

```

<210> 82

<211> 535

<212> DNA

<213> Mus musculus

<400> 82

```

gaattcggcc aaagaggcct aggaaccatt aaagcacatt ggaaaaggag caggtgaatt 60
cattaaagcg ctcataagag agattccagt gttacttcag attccgggtgc tggcgatcct 120
ggcgctggct gtcctgagct tctgctatgg tgctggaagg tcagttccta tgctgagaca 180
cttcgggtggt cctgacagag aacctccccg agcacttgag ccagatgaca gaagacgaca 240
gaagggaactt gactatagac tccatgggtg agcaggtgat ccagatttct cttacagggg 300
cccagctggc tccatcgagc aaggccctta tgacaaaatg catgcgagta agagagatgc 360
tttgagacag agatttcact ctggcaacaa gagccctgaa gtgctccggg catttgactt 420
acctgacaca gaggcacaag aacatccaga agtggtcccc agccataaat caccattat 480
gaacacaaac cttgagactg gtgaactccc aggagaaagc accccggaac tcgag 535

```

<210> 83

<211> 430

<212> DNA

<213> Mus musculus

<400> 83

```

gaattcggcc aaagaggcct aaatcataaa tatctgtatg ctattgaaat ttaactttgt 60
atgatgctta aaccactatt tggggaaata ataaaataag tctttaccat gtatgaaaga 120
aattttaaaa aatacaaaa attttctgat tagcatctag cttataataa attttcaaaa 180
aagctgaagg caactgtgac ctccatcagg atgcactgag aactatatag ttacgtcctg 240
cgttttgtat aaactgagat gctcatgtgc ttccccttag aacaggcaat gtgctatgca 300
taacatagtt gtacattatc tttgcagttg ctttgagttt tattttttat tattttaaac 360
tgtagttata aaaattttca gtatagtaca gtacatatac tgtgaggcgc gattctagac 420
ctgcctcgag 430

```

<210> 84

<211> 528

<212> DNA

<213> Mus musculus

<400> 84

```

gaattcggcc aaagaggcct atgcagcttg taatgggttc gagaatggta atgaagatta 60
tgctaggtag aaaacactac aaaagcagat gtgtggaatc ttttcctttt cctagacttt 120
gtatttatat aaaggcaaac aaaacctaga gtatcccgtc atttttagtc tagatctgta 180
gcaactataa tctgaaagag aaacttggtt aaaaaaaaaa caaacactgt gaaccccaac 240
aggcctggag gatcaagaat cagagacata gttgatTTTT taggcttttg cctgcagcgc 300
ttctcattgt tagcctcagt ttcccccaaa ggtcagacaa gtactagcaa ttcccagac 360
aacctcactg atttttagtca accaaggagc aagtacttgc tctagaatca atgttggtta 420
tggtcaacag ctcacgggcc gtgctgcgca tcttaacgta gagccagtgt gagttcaggg 480
ccagcactgt cttcccagca gacctttctg attgcgcgca gtctcgag 528

```

<210> 85

<211> 144

<212> DNA

<213> Mus musculus

<400> 85

```

gaattcggcc aaagaggcct aattgaattc tagacctgcc tcgagtgttt tctttgactg 60
actttaaata cttctatgat tttttttct cttctagttt tccctgtgat gtgtgccagt 120
gtgaattgta tgggtgtact cgag 144

```

<210> 86

<211> 379

<212> DNA

<213> Mus musculus

<400> 86

```

gaattcggcc aaagaggcct actttgggtg tttcgctacc tgcgagcct ccgcctggat 60
gctgaaactg taccgatgt ttctgacact ctttttttg gtcgaaactg ttgcgcctat 120

```

```

tgttggattt gttttcagac atgagattaa gaacagcttt aaaagtaact atgaaaacgc 180
tctgaaggag tacaactcca caggagacta tagaagtga gctgtagaca agatccaaag 240
tacgttgcat tgttgcggtg tcaccaatta cggagattgg aaaggtagca actattactc 300
agaaacagga ttccccaaga gctgctgtaa actggagggc tgttatccac agagagatgc 360
agataaagtg caactcgag                                     379

```

<210> 87
 <211> 441
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (60)..(61)

<220>
 <221> unsure
 <222> (136)

<220>
 <221> unsure
 <222> (151)

```

<400> 87
gaattcggcc aaagaggcct actaacttcc atttctacct tatgtcctca aaatgcattg 60
ntgtgatctg aaagaagcat ccagaaaaac tgttcatttc ctgagtagcc aagttagaac 120
aaataaatga tacacnaaga aaactgattt naattcttga caagaacctg tgaatgtttt 180
cttttgaagg aatgtggaag acataaggac tgagatggca aaggcataga aacctgtaca 240
cagatcttca tctactgttc ttgtaggacc tggtaggtac cactgttttag actattatgg 300
gcagagtaag gtgaggtcat aggatttcaa ggggaaatag tgatatgaaa aaatttagct 360
agaggtcatg tgtgatagtt tggccacaaa tgtttttcat tctatccatg acctctgaaa 420
ttgagggaagc aggatctcga g                                     441

```

<210> 88
 <211> 372
 <212> DNA
 <213> Mus musculus

```

<400> 88
gaattcggcc aaagaggcct aggaagatga acaaacgaca gctctactac cagggtttta 60
actttgccat gatcgtgtct tctgcgtcca tgatctggaa aggcctgatt gttctcacgg 120
gcagcgagag tcccatcgtg gaggtactca gtggcagtat ggagccggcc ttccacagag 180
gagatctgct gttcttcacg aatttccggg aggaccccat cagagctggt gaaatagttg 240
tttttaaggt tgaagggaaga gacattccga tagttcacag agtaatcaag gtttcatgaa 300
aaagataatg gtgacatcaa gtttctgact aaaggagata ataatgaagt cgatgataga 360
ggcagcctcg ag                                     372

```

<210> 89
 <211> 436
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (354)

```

<400> 89
ctcagggatg tccttcttgc cttcttcttc ctcacagcc ttctcatgct ccagagactc 60
gatgcgagat gcatttttct ctggctcaat aatcaacgtt tccttggttt taaaagcctt 120
ctgtgggtga ttgttttcca tatttgctgt ggactcgatc agtggagatt tcttatcccg 180

```

```

cttctcacta tggagcagag ttgtttttt ttgcaactct tctagatata ccaaaatgtc 240
ttcatctgct acatcaaagg ctgttttgcc cactttgttg accgtctcca tatcacacag 300
attgtccact aaaatccgac atgcttcctt tacccaatg agctgcagca tgangagggtg 360
tccagccatc ataatcttta atattaacat catagcctgc ctgtattaaa agtttttaggg 420
ctctttgggc gaattc 436

```

<210> 90
 <211> 373
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (12)

```

<400> 90
gaattcggcc anagaggcct actttctgaa gacaaaagct aagatgaagg acacgccact 60
ccaagtccat gtgctacttg gcctagctat cactacacta gtacaagcta tagataaaaa 120
agtggattgc ccccaattat gtacctgtga gatcaggcct tggtttacc cagatccat 180
ctatatggaa gcacgcagag tggactgtaa tgatttaggg cttttaact tcccagccag 240
attgcctgcc gacacacaga ttctgctcct acagactaac aatattgcaa gaattgaaca 300
ttccacagac ttcacagtga acctgactgg cctggactta tctcaaaaca atttatcaac 360
agtcacactc gag 373

```

<210> 91
 <211> 306
 <212> DNA
 <213> Mus musculus

```

<400> 91
gaattcggcc aaagaggcct agaagtagaa agctgccatt tgtttaagag aaaataccga 60
aaccttactt aacagtgtat aatgtttata aaggaagttt gtaataggaa cttggcaggt 120
ttgattggta ggtaccatac tgagggcagc cttctatagc acatctctcc aatgtgattt 180
gtggacattc aaagcctgct tggttccctg caggaccaca catgctgctg cactcactcc 240
tggactgtag aagtaaatac cttaatgctt tatcatttga cattctaacc aaggaaaaag 300
gtcgag 306

```

<210> 92
 <211> 344
 <212> DNA
 <213> Mus musculus

```

<400> 92
gaattcggca aagaggccta ctctccccc cccctctctc tctctctcgc atactaacta 60
ggtttgactg tattactcgt accagattta aaattagact agccttgcca caacgcccta 120
ctgagaggta ctgtcgaact gtagacagca tgatgttctt tgatggtgaa agtctaaatc 180
tggaccgtgt tcagagatac caaatgatga ggctgaaaag gggaaagggg gttcttcagt 240
ctctctctct tctctctttt attttttttt ccatgatgtt ttctctatgg ccagtgcaaa 300
tgggtgtgtc acccttgcat gttgccaaac gcaggcatct cgag 344

```

<210> 93
 <211> 530
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (30)

<220>

<221> unsure
<222> (69)

<220>
<221> unsure
<222> (105)

<400> 93
gaattcggcc aaagaaggct aggaagctgn tgagctagac ggaacccaaaa gcatctaaaa 60
ggatgtacnt cagagggatt cagccattcc actcctaccc ctcctcaga acctcatgaa 120
gttcctggct ttcctgagtc tgttgagctt ggtgctgcag aaggcagaga cagcttctct 180
cctaggggag agagaaaagag aagagcagag ccctgaggaa ggtgacaact tacgcgtccc 240
tgtatgtggg gaaccatacc ctgagcatag aggactacaa cgaggtcatt gatctcagca 300
actatgaaga actggcagac tatggagacc agatccctga ggctaaaata agcaatctga 360
ctcttccaac aagaactagt cccactagca ctgtggctca gaagacattg tcaccaaacc 420
tcacgatggc cgtacctacc accactggcc tactaaactc ccagagcagt catgcaaaac 480
tgagaaggat cgacctctct ggcaactcca tctcctccat ccacctcgag 530

<210> 94
<211> 644
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (191)

<400> 94
gaattcggcc aaagaggcct atggacctgc gtcagtttct tatgtgcctg tccctgtgca 60
cagcctttgc tttgagcaag cctacagaaa agaaggaccg agtacaccat gagcctcagc 120
tcagcgataa agttcacaat gatgctcaga attttgacta tgaccatgat gccttcttgg 180
gtgcagaaga ngcaaagagt tttgatcagc tgacaccaga agagaccaag gaaaggcttg 240
gaaagattgt aagtaaaata gatgacgaca aggatgggtt tgtcactgtg gatgaactca 300
aaggctggat taagtttgca caaaagcgt ggattcacga ggatgtagag cggcaatgga 360
aggggcacga cctcaatgag gatggcctcg tttcctggga ggagaataaa aatgccacct 420
acggctacgt tttagatgat ccagatcctg atgatggatt taattataaa cagatgatgg 480
tcagagatga gcggagggtt aaaatggcag acaaggatgg agacctaat gccacaaagg 540
aagagtccac agcttctctg caccctgagg aatatgacta catgaaagac atagtcgtgc 600
aggaaacccat ggaggatata gacaagaatg ctgatgggct cgag 644

<210> 95
<211> 413
<212> DNA
<213> Mus musculus

<400> 95
gaattcggcc acagaggcct atgctgtcgg agatggatgt aacaggctcag gcttttgaag 60
acatgcagga gccaaacggg cggctacttc agcagttacg ggaaaaggat gacgcccaacc 120
ttcaaagctca tgtcggagcg gatcaaggcc aaccagattc acaagctgct ccgagaggag 180
aaggatgagt tgggcgagca ggttcttggc cttaagtccc aggtggatgc ccagctgctg 240
accgtacaga agcttgagga gaaggagcgg gctctgcagg gcagcctcgg ggggtgtggaa 300
aaggagttga ctctgcgcag ccaggctctg gagcttaata agagaaaggc tgtagaagca 360
gcccagttgg ctgaggacct gaaggtgcag ttggagcatg tacagagctc gag 413

<210> 96
<211> 488
<212> DNA
<213> Mus musculus

<400> 96


```

gaattcggcc aaagaggcct attcagcatc atcattcagt ttctgttcac aagagcacca 60
gctgagctga aatccccctt ccagagggca gaatggtctc atgctcgctt cttccagtgg 120
ctggatgata acccatctga aaaggacagg ctgctcctcc tcaggggagc cctggaagct 180
tatgttcagt cagtgagaag cagggacggt aaagaatttg caccagttta tcccattatg 240
gttcagctgc ttcaaaaggc tatgtctgct cttcagtgc ttgcagtctc catgaacaga 300
cccgctccaa gaaagcagtg ccaaatggtg gatggccagg aattgcacca gcccagatca 360
tcacatcttg acagggagga catacagaaa atgcctgact ctgactcact gtttgcctgt 420
acagagaaaa cagaaacttc tgttttgtta tttttaaaag atcttttaat acctctttta 480
aactcgag                                     488

```

<210> 97
 <211> 597
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (144)

<220>
 <221> unsure
 <222> (280)

```

<400> 97
gaattcggcc aaagaggcct agatgtgggc tccttcatga taaaactggt ggaaggcctt 60
cagggccaga tgtggtcttc agattgggct gaggagcttc ggaaagctga ccagcagaag 120
gagcagacct atcgggataa ggcnttaatg cctgtattac agcacctgaa cccagtatgg 180
gtgttacagc aggtggagga aactctgcct gacaatgcac ttcttgggtg tgacggaggg 240
gactttgtgg cactgctgc ctacttagtc cagcccagan ggcctctgcg ctggctcgat 300
cctggggcct ttgggactct gggagtgggc gcaggttttg cacttggggc caagctgtgt 360
cagccggagg ctgaggtgag gcattggatg tgggagacta actgccttct gggctgcgaa 420
ctaccctaac tgccctgggt cgtctcccc cctccctccg ctccctccag gtttgggtgcc 480
tgtttgggga tggagccttt ggctacagcc tcattgagtt tgacacgttc gtcagacata 540
aggtaccagt gatagccttg gtaggaaacg atgcaggttg gaccagatt tctcgag 597

```

<210> 98
 <211> 556
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (16)

<220>
 <221> unsure
 <222> (82)

<220>
 <221> unsure
 <222> (104)

<220>
 <221> unsure
 <222> (136)

<220>
 <221> unsure
 <222> (223)

<220>
 <221> unsure
 <222> (331)

<400> 98
 gaattcggta agagangcct ggctgagaac tctggacgca agtttgctgc aactcacaga 60
 tttagaaccc aaaaagagag anagaatgtg gcagatcatt ttcntaactt ttggctggga 120
 tcttgtcttg gcctcngcct acagtaactt taggaagagc gtggacagca caggcagaag 180
 gcagtaccag gtccagaacg gaccctgcag gtacacgttc ctntctgccg agaccgacag 240
 ctgccgatct tcctccagcc cctacatgtc caatgccgtg cagagggatg caccctcga 300
 ctacgacgac tcagtgc aaa ggctgcaggt nctggagaac attctagaga acaacacaca 360
 gtggctgatg aagctggaga attacattca ggacaacatg aagaaggaga tggaggagat 420
 ccaacagaat gtgggtgcaga accagacacc tgtgatgata gagattggaa ccagcttgct 480
 gaaccagaca gcagcaca aa ctcggaaact gactgatgtg gaagcccaag tactaaacca 540
 gacgacaaga ctcgag 556

<210> 99
 <211> 380
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (14)

<400> 99
 gaattcggcc aaanaggcct agcgccttct tggaatagcg tgtgaagatg gccctcatat 60
 cctctgccaa tgcgtaaaag gtgtaggcag catgccacct gcggcgca gctggctcca 120
 tggcccgcca ggtcaggtgc caccacctca tagccgagtc gcacaaagaa gtctagctgc 180
 tccttcagga tggcgagtga gccaccgact cctggaatga agaacagcac cacatcagcc 240
 tgcgcaccct tgcagctggt gatgcgctgc tcacagtcga tgtggatggt cctcttcgga 300
 cgcctggggc ggcgcgctcg cccgctgcct gggttggccc ggggtgtctc tcctgcgggc 360
 tcagccagct caacctcgag 380

<210> 100
 <211> 592
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (52)

<220>
 <221> unsure
 <222> (117)

<220>
 <221> unsure
 <222> (132)

<220>
 <221> unsure
 <222> (431)

<400> 100
 gaattcggcc aaagaggcct agagcgaccc tgttacacta aagatgaaag gntgggggtg 60
 gctagccccct acttttgggg gtctgtgtgg gaactgcctg ggatcgaagg agccaanatc 120
 tacactgttg ancttgacag gtctgtgtgg atgaattaga gtgggaaatt gcccgcgtgg 180
 accccaagaa gaccattcag atgggatcct tccgaatcaa tccagatggc agccagtcag 240

```

ttgtggaggt accttatgcc cgctcagagg cccacctcac agagttgctt gaggaggtgt 300
gtgaccgaat gaaggagtag gggaacagat tgaccttcta cccaccgcaa gaactacgta 360
cgctcgtgta gccggaatgg agaattccagt gaactagact tacagggcat ccgaattgac 420
tcagatatca ncggcaccct caagtttgcg tgtgagagca ttgtggaaga atacgaggat 480
gagcttatcg aattcttctc cagagaggct gacaacgtta aagacaaact ttgcagtaag 540
cggacagatc tatgtgacca tccccgcac agatcctcac gaagagctcg ag 592

```

<210> 101
 <211> 382
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (150)

```

<400> 101
gaattcggcc aaagaggcct aaagacatgg tcagttttga agtcccagtc catcacgttc 60
ttgtcacagc atgaaatgat ggcttcacn aaatgtggac gcttcacag gataagaaag 120
ttctccatc tttgctgtgt gaggccaaaa ctggtgccag gctgacatgt cttactgtgt 180
ggttagacag agcagcaaat ggaatggcga gccttcctcc agcagcagag ccctgccctg 240
accaacctaa gacaatcgaa aaggaatctg gtgacacagt tcaggaagaa acatcagaac 300
ctaactcgga gaaatctgat gtaagtgtg acagcaagca gccacaaaa ggaatatagc 360
cagtgacagc caagaactcg ag 382

```

<210> 102
 <211> 640
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (9)

<220>
 <221> unsure
 <222> (13)

<220>
 <221> unsure
 <222> (30)

<220>
 <221> unsure
 <222> (38)

<220>
 <221> unsure
 <222> (41)

<220>
 <221> unsure
 <222> (47)

<220>
 <221> unsure
 <222> (54)

<220>
 <221> unsure

<222> (56)

<220>

<221> unsure

<222> (60)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (72)

<220>

<221> unsure

<222> (76)

<220>

<221> unsure

<222> (122)

<220>

<221> unsure

<222> (126)

<220>

<221> unsure

<222> (130)

<220>

<221> unsure

<222> (183) .. (184)

<220>

<221> unsure

<222> (312)

<220>

<221> unsure

<222> (316)

<220>

<221> unsure

<222> (353)

<220>

<221> unsure

<222> (388)

<220>

<221> unsure

<222> (423)

<220>

<221> unsure

<222> (490)

<220>

<221> unsure

<222> (503)

<220>

<221> unsure

<222> (609)

<220>

<221> unsure

<222> (612)

<220>

<221> unsure

<222> (616)..(617)

<220>

<221> unsure

<222> (623)

<220>

<221> unsure

<222> (632)..(633)

<400> 102

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gaattcggna acngaggcca aaggaatccn taagggcntg naaactntct gaananaaan 60
gctangatga angacncgcc actccaagtc catgtgctac ttggccaagc tatcactaca 120
cnagancagn ctatagataa aaaaaaggat tgcccccaat tatgtacctg tgagatcagg 180
ccnnggttta ccccgagatc catctatatg gaggcacga cagtggactg taatgactta 240
gggccattaa acttcccagc cagattgcct gccgacacac agatttctct cctacagact 300
aacaatattg cnaganttga acattccaca gacttcccag tgaacctgac tgnctggcc 360
ttatctctcc acaatttatc ttcatgcnct aatattaatg tacacaagat gtctcagctt 420
ctntctgtgt acctagagga aaacaagcta cctgagctcc cggaaaagtg tctatatgga 480
ctgagcaacn tgcagggact ctncgttaat cacaacctgc tctctaccat ttctctccgg 540
agccttcatt ggcctacata atcttctccg gcttcatctc acctcacaca gactgcagat 600
gatcaacant cnatgnnttg atnctctccc cnntctcgag 640
```

<210> 103

<211> 337

<212> DNA

<213> Mus musculus

<400> 103

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gaattcggcc aaagaggcct actctcttta cctctcttta cctgtatatt ataaacagct 60
gggaatgtca cctagccaga gtggactgtt ggtgggcatt cgatacttca ttgaattctg 120
cagtgcctcc ttctggggtg tagttgcaga tcgtttcaga aagggcacaa ttgtctctct 180
cttttcgctt ctgtgttggg ttttgttcaa cctgggcatt ggatttgtca aacctgctac 240
cttgagatgt ctaccaaaga tcccccaac agctcacccc accaatgtaa gtcacccagt 300
aactgttctg ccaatgaact cctccactgt gctcgag 337
```

<210> 104

<211> 382

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (86)

<400> 104

```
gaattcggcc aaagacgcct aagaacccat gggactccca aggcggctgc tgctgctgct 60
gttgcgtggcg actacctgtg tccancctc ccagggcctg cagtgcacgc agtgcagag 120
```

```

taaccagagc tgcctggtag aggagtgtgc tctgggccag gacctctgca ggactaccgt 180
gcttcgggaa tggcaagatg atagagagct ggagggtggtg acaagaggct gtgcccacag 240
cgaaaagacc aacaggacca tgagttaccg catgggctcc atgatcatca gcctgacaga 300
gaccgtgtgc gccacaaacc tctgcaacag gccagaccc ggagcccag gccgtgcttt 360
ccccagggc cgttacctcg ag 382

```

<210> 105

<211> 437

<212> DNA

<213> Mus musculus

<400> 105

```

ggccaacac tggaggcatc ttcctcatgg ctgggggttg attcggcttc cttttttgct 60
ggatattgat gatccttggt gttcttacgt ttgttggttg tgcaaatgtg gaaaagttgc 120
tctgcgaacc ttatgaaaac aagaaattat tacaggtttt ggacactccc tatctgctca 180
aggaacaatg gcaattttat ctttctggca tgctattcaa taaccagac attaacatga 240
cctttgagca agtctacagg gattgcaaaa gaggtcgagg tataatgtct gcttttcagc 300
ttgagaatgt cgtcaacgtc agtgatcatt tcaacattga ccagatttct gaaaacataa 360
atacggagtt ggaaaacctg aatgtgaaca ttgatagcat tgaactgttg gataacacag 420
gaaggaagag cctcgag 437

```

<210> 106

<211> 169

<212> DNA

<213> Mus musculus

<400> 106

```

gaattcggcc aaagaggcct acaggggtaa gggggagatg atttttaaaa aaattcagct 60
gttggttaggg gcatgtgaag taggggcatt atgtctgttt cttattacga taaaggctcc 120
tcagtcctta ctgaccccta aagtcctgaa tcacaccagg cgtctcgag 169

```

<210> 107

<211> 446

<212> DNA

<213> Mus musculus

<400> 107

```

gaattcggcc aaagaggcct agttcgtatc ttctgttgac tacaaccccc gggacaacca 60
gctctatgta tggaaacaact actttgttgt gcgctatagc ctggagtgtg gacccccaga 120
tcccagtgtc ggcccagcca cttccccgcc tctcagtacc accaccacag cccggccccc 180
accctcacc agcacagcct cgctgcagc caccactcca ctccgccggg caccctcac 240
cacacacca gtgggtgcca tcaaccagct gggacctgac ctgcctccag ccacagctcc 300
agcaccagc acccgaaggc ctccagcccc caatctgcat gtgtcccctg agctcttctg 360
tgaacccaga gaggtccggc ggggtccagt gccagctacc caacagggta tgctgggtgga 420
gagaccttgc cccaagggaa ctcgag 446

```

<210> 108

<211> 426

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (87)

<400> 108

```

gaattcggcc aaagaggcct acttgctccg gcatggctgc cttagggacc tggctgtcca 60
gtgtccggag attgcactgc agcgtantgg cgcgggccgg tggccagtgg cgactccagc 120
aagggtgtgc tgccaaccct tccggctatg ggcctccac ggagctccct gactggctcc 180
tcgcggatgg ccgcccgtca cccccaatga aaggccaact tcgaagaaaa gctcaaaggg 240

```

```

agaagcttgc aagacgagtt gtactgctga cacaggaaat ggatgctgga atacaggcat 300
ggaagctcag gcagcagaaa ttgcaggaag aaaggaagaa ggaacatgat ctcaaacccta 360
aagggaacttt actgagaagc ccacttccga atcaataaaa agcagctcct gccccacaaa 420
ctcgag                                         426

```

```

<210> 109
<211> 454
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (18)

```

```

<220>
<221> unsure
<222> (448)

```

```

<400> 109
gaattcggcc aaagaggncat atccagcact tccccctac acaatgctgc ctgctgccct 60
aacctccttt ctggggcccat tccttttggc ctgggtgctg cctcttgccc gaggccagac 120
ccccaaactac acgagacctg tgttcctgtg cggaggggac gtgaccgggg agtcagggtta 180
cgtggcaagt gaggggttcc ccaacctcta cccccaaac aagaagtgga tctggacaat 240
tacgtgcccc gagggccaga ctgtgtccct gtccttccga gtcttcgata tggagctcca 300
cccttcctgc cgctacgatg ctctggagggt ctttgctggc tctggcacct caggccagcg 360
acttggaagc ttctgcggca ccttcaggcc tgcacctgta gtcgcacctg tcaaccaagt 420
gactttaagg atgacaactg acgtgggnct cgag                                         454

```

```

<210> 110
<211> 377
<212> DNA
<213> Mus musculus

```

```

<400> 110
gaattcggcc aaagaggcct agtctgaatg ccagaatgga taaccgtttt gctactgcat 60
ttgtgattgc ttgtgtgctt agtctgattt ccaccatcta catggcgccc tccataggca 120
cggacttctg gtatgagtat cgaagtccca ttcaagagaa ttcaagtga tcgaataaaa 180
tcgcctggga agatttcctc ggtgacgagg cggatgagaa gacttacaac gatgttctgt 240
tccgatacaa cggcagcttg gggctgtgga gacggtgcat caccataccc aaaaacactc 300
actggtatgc gccaccggaa aggacagagt catttgatgt ggttacaaa tgcattgagt 360
tcacactaaa tctcgag                                         377

```

```

<210> 111
<211> 426
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (117)

```

```

<400> 111
gaattcttcg gccaaagagg cctactgatt cgaatcagaa aacttacact gaagcgacag 60
aggaagcttg ttcttttgag taagaaggtt gaacgaaggg aaaaacgaag agagganaaa 120
gcattaatag ctgcccagct ggacaatgct attgagaagg aattgctgga gagactgaaa 180
caagatacgt atggcgacat ctacaacttc cccatccatg ccttcgacaa ggccctagag 240
aaacaggaag cagaaagtga ctctgaagat gaagacgaag aagaggatgt ggggaaaaga 300
gagttttagt aagatgagga ggtggaggag agtgacctga gtgactttga ggatatggat 360
aaactgaata ctgacagtga ggaagaccag gatgatgaat cctccaatga agaagagcga 420
ctcgag                                         426

```

<210> 112
 <211> 460
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (101)

<400> 112
 gaattcggcc aaagaggcct accaaccct accagttcgc atcttctgtt gactacaacc 60
 cccgggacaa ccagctctat gtatggaaca actactatgt nggtcgctat agcctggagt 120
 ttggaccccc agatccaggt gctggcccag ccacttcccc gcctctcagt accaccacca 180
 cagcccgccc cacaccctc accaccacag cctcgctcgc agccaccact ccactccgcc 240
 gggcaccctt caccacacac ccagtgggtg ccatcaacca gctgggacct gacctgcctc 300
 cagccacagc tccagcacc agtaccgaa ggcctccagc cccaatctg catgtgtccc 360
 cttgagctct tctgtgaacc cagagaggtc cggcgggtcc agtggccagc tacccaacag 420
 ggtatgctgg tggagagacc ttgcccgaag ggaactcgag 460

<210> 113
 <211> 501
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (22)

<220>
 <221> unsure
 <222> (35)

<220>
 <221> unsure
 <222> (68)

<220>
 <221> unsure
 <222> (374)

<220>
 <221> unsure
 <222> (417)

<220>
 <221> unsure
 <222> (421)

<400> 113
 gaattcggcc aaagaggcct anccagatcc tcgtngtcac tcttccgac gatcccacaa 60
 gggcaganaa tcccagggtc tgactcctaa ccgtgagcgt ccaggcgcta ctctggggccc 120
 ccttccgggtc cccaccttca cgcgctgag tctgggaccc cccgactcgc taaggaccaa 180
 cttcgacta caagaagaac acgggggtgcc ccaggacgag cgacgctgc agttaaggct 240
 gtgacccctt taacctctc gtccaaatcc ccgtggcgcc ctteccaaact gcagacgcgc 300
 ccagcctctc cggctccacc gcaatgggtc ccgctgcccc acgccttaa ccgggagccg 360
 gacccggggc ctctgtgat gctgttgctg ggacccaaag cgcagacccc atttttnccc 420
 ncaggcgccg gggcgaacta agaacgctga gccccacaga gccgccagcg atgttaaact 480
 taaatgcccg gtgcgctcga g 501

<210> 114

<211> 419
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (119)

<220>
 <221> unsure
 <222> (392)

<400> 114
 gaattcggcc aaagaggcct agtgaatggg gtcagtactg caagcagctc ctggacggct 60
 tcacgggcct ccggctccag cacagcatat cgacgtagct gccggtcggg acaaatgtna 120
 gaaaagcgaa gaacaagaac tggagcccca gggaatggac ctgagccctc agacactggt 180
 tctccttggg ttctcagtctc ggactctagc tcagctgcca ccagactctg tagctccagc 240
 cgctccagag tccgagctgc ttggagtctc acatcaaaca agtgggcaga agtgaccccg 300
 agaaagcact ccttgccttg cacaccccca agtccttgca agggacatac caacatgggg 360
 cgacagagct cagcttccac tgccttctgc tncgtctcct cctcctctc ctcctcgag 419

<210> 115
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 115
 gaattcggcc ttcattggcct acttttctct tatcaacaac tccatcgtct acctgcactg 60
 caaactccgc gtctgcatgg aatcccccg agccacgtgc aaaatcaatt gcaataactt 120
 tcggttgctg caaaatagtg aaacctctgc cacacaccag atgtcctggg gacccctcat 180
 ccggtctgaa gaagcaggcc tgggtgccgg ttatgtggtc cttattgtgg tggccatctt 240
 cgtgctgggt gcgggaacag ccacccttct gatcgtgccc taccagagaa tgaacggggag 300
 tctcgag 307

<210> 116
 <211> 289
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (91)

<220>
 <221> unsure
 <222> (198)

<400> 116
 gaattcggcc ttcattggcct aaagagattg gtaaataagc agttaaact caaagaagaa 60
 taaagtggag gtggataaga agcataagta ncattctgtg gctgtgaaga ggaaggagca 120
 attaaaagtg acttgaagat tagaattgtt catgtcttct tgttttttgt ttttgttttt 180
 tgagacattg tttcactntt gtcgcccagg ctggagtgc atggcgcaat ctcagctcac 240
 tgcaacctcc acctccctgg cctcaagtga tccaccacc cgtctcgag 289

<210> 117
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 117

```

gaattcggcc ttcattggcct aatattttgt ttagcatttc tagttttcct cagtggatct 60
gtcatccagc aaatggaagt cccctacata tattttctaa gcttttttga gttgggtttt 120
tggttttttt tccctccctt tctgcctctc tccctccttt tctcctccct cctgcctctt 180
tccgtccctt cctccctccc ccgctctctc tctccgtccc tcttttcttt ctccctgcct 240
gcctgcctac ctgcagttgt ccgagcaggc attactgggg ctggagggtc cctttccaag 300
atggctcatt cacatggctt ccagctcgag 330

```

<210> 118

<211> 304

<212> DNA

<213> Homo sapiens

<400> 118

```

gaattcggcc ttcattggcct aaaaaaatt atttaatttg ctaatctttg tattctagt 60
tgctgccaaa gtgagcacat aattttgttt ttttgtttgt ttttgtttct taatgtttgg 120
agaatttttg tgggtttttt gtttgtttct tgagacgtac tcccgccctg ttaccaggc 180
tggagtgcac ttgcgcgac ttgggtcact gcaacctccg cctcccggt tcaagcgatt 240
ctcctgcctc agcctccaga gtagctggga ttacaggcgc ccgccaccac gccacacgct 300
cgag 304

```

<210> 119

<211> 348

<212> DNA

<213> Homo sapiens

<400> 119

```

gaattcggcc ttcattggcct aggggaaatg aaacatttct gtaacctgct ttgtatcttg 60
atgtttctgta atcagcaaag tgtatgtgac ccgccttcac aaaataatgc agcaaattt 120
tccatgggtc aagctgcttc agcaggaccc ccatctctga gaaaagattc gactccagtt 180
atagccaatg tagtatcatt ggcaagtgc cctgctgctc agcctacagt gaattctaac 240
agtgtcttac aagggtgcagt tccaacagta acagcgaaaa tcatcggtga tgcaagtact 300
caaacagatg ccctgaaact gccaccttcc caacccccaa ggctcgag 348

```

<210> 120

<211> 323

<212> DNA

<213> Homo sapiens

<400> 120

```

gaattcggcc ttcattggcct aaaagtgtg gcatattgct gtggccagca accagatgat 60
gtgtttctgc ttcctgggtc tttattacag gaaagatggt tgacatatca cagggcccag 120
catccaggat ctgtgggaca gaccagcag gtggtgcccc atgtaagaag caatgaaatg 180
catcatgatg gaacctcaa aaacgaaagt gaagttaact cacaccctt aggtcctctt 240
tggattccag catgatgcat caaaccttac cacggcatga ctagggccca acctgctacc 300
agaaataaag gaaataactc gag 323

```

<210> 121

<211> 329

<212> DNA

<213> Homo sapiens

<400> 121

```

gaattcggct aaagaggcct acaggaactg agcaagatct tccttcccct gaaaatagtt 60
ctgttaaaga ataccgaatg gaagttccat cttcgttttc agaagacatg tcaaataatca 120
gtgcacagca tgcagaagaa cagtccaaca atggtagata tgacgattgt aaagaattta 180
aagacctcca ctgttccaag gattctaccc tagccgagga agaactctgag ttcccttcta 240
cttctatctc tgcagttctg tctgacttag ctgacttgag aagctgtgat ggccaagctt 300
tgccctccca ggacctgag gagctcgag 329

```

<210> 122

<211> 379

<212> DNA

<213> Homo sapiens

<400> 122

```

gaattcggcc aaagaggcct agtgagtctg ggagaacgtg aagatgtgta tgtatctaag 60
aagttttttt tgttttgttt tgtttttgag atggagtcta gctctgtcac ccaggctgga 120
gtgcaatggc acgaactcag cccactgcaa cccccgcctc cggggttcac accattctcc 180
tgtctcagcc tcccagtag ctgggaccac aggcattgag caccacaccc agctaatttt 240
tgtattttta gtagagacag ggtttttcca tgttggtcat gctgggtctg aactcccaac 300
ctcaagtgat cctcctgcct cggcctccca aagtgtctggg attacaggag tgagccactg 360
cgcccgccca gctctcgag                                     379

```

<210> 123

<211> 245

<212> DNA

<213> Homo sapiens

<400> 123

```

gaattcggcc aaagaggcct atgaattcta gacctgcctc gagtttctctg tttttcttct 60
ttattcttat tactatttct atggcctcca catttacttc cttttgcctt cttttcttcc 120
gttacactat taattctttc tacatcttga agtttctttt ccttctctct cctctctctg 180
caacccccat catacacaca cacacacaca catcatacac acacacacac acacacccac 240
tcgag                                     245

```

<210> 124

<211> 134

<212> DNA

<213> Homo sapiens

<400> 124

```

gaattcggcc aaagaggcct aatgaatata tatatatgaa aaaacaatat atatacatat 60
tgggtttgat actatccaca gtttcagtca tcaactgcgag gtcttggaac tgtgactact 120
ataaggggct cgag                                     134

```

<210> 125

<211> 216

<212> DNA

<213> Homo sapiens

<400> 125

```

gaattcggcc aaagaggcct agtgggggtg ggaatctagg gtgtacttaa gatgtcttca 60
aatgttttta ttttattttt atgtatttat tttatttatt tatttatttt ttcagagaca 120
gaatctcggg tgggcacggg ggctcatgcc tgtaatccca gcactctggg aggccgaagt 180
gggaagatcc ctcgaggcag gtctagaatt caatcg                                     216

```

<210> 126

<211> 344

<212> DNA

<213> Homo sapiens

<400> 126

```

gaattcggcc aaagaggcct aggagaaaga agcattgtgg ctttatatcc tctgggcctg 60
ggtttcctga agtcaccaca catagaggag agagaaaatg gctgagttaa agtacatttc 120
tggatttggg aatgagtgtt cttcagagga tcctcgctgc ccagggtccc tgccagaagg 180
acagaataat cctcagggtc gccctacaa tctctatgct gaggcagctc caggatcggc 240
tttcacttgt ccacggagca ccaataagag aagctggctg tataggattc taccttcagt 300
ttctcacaag ccctttgaat ccattgacga aggccacgct cgag                                     344

```

<210> 127

<211> 308

<212> DNA

<213> Homo sapiens

<400> 127

```

gaattcggcc aaagaggcct agtgagaaaa gcacactgtt tcaattgcaa atttcaggca 60
accctgttgc ttctgacaaa ataatagttt gagtagcctc aggttctggg tggcgtccct 120
ctcaaaaagt ctgcttctgt gagggtgaat tatcaatggc tcttggttc ttagaaaaag 180
taccagctt tccttctac tttattgttt tgtttgttt ttagagaca gggctctgtt 240
ctgctgccca ggctggagtg cagtggcatg atcggaactc actgcagtct caaactcccg 300
ggctcgag                                     308

```

<210> 128

<211> 277

<212> DNA

<213> Homo sapiens

<400> 128

```

gaattcggcc aaagaggcct agtcacagtg aactgcaaag aagttattat agcagatgaa 60
tacaactac ttggtgactg gctggatcct tgaatgggtg tacagagctg tgatctggag 120
tgtggtctct ggagccagtc tgctccagt tttttatct tttttatct tatcttattt 180
tgttttattt tattggagat ggagtctccc cattaccag gctgcagtgc agtggcatga 240
ccatggctca ttgcagcctc aacgcccagg actcgag                                     277

```

<210> 129

<211> 185

<212> DNA

<213> Homo sapiens

<400> 129

```

gaattcggcc aaagaggcct aagtgtgttt tccctctttt agtttttgtg aaagctgggt 60
gttaaaaaaga acctggtacc ttctcctct cctctgttt ccactctggt catgtgatct 120
ctatacacca gctccccttc acctcttgcc atgagtgaag gcagactgag gccctcagcc 180
tcgag                                     185

```

<210> 130

<211> 352

<212> DNA

<213> Homo sapiens

<400> 130

```

gaattcggcc aaagaggcct agtcacaaat aaaaccaatt aaattttatg tccacaataa 60
aatgcaaagt ctttgttgtg aactcagaa ctattcccag ccactctcc tgccattttc 120
ctgcaatatg atttatccta ggcatactga accgtcagtc agtctcttg attgctatgt 180
atttgacat gcctcttctc tctttgctca gctacatgac atgcttcaaa cctcaggtga 240
gatgatagtt tctccatgta accttcaggt ggggctaggt accttgcatc tgtgtttcct 300
tggcaccttg catttagctg catggctctg cagctcttcc actaaactcg ag                                     352

```

<210> 131

<211> 445

<212> DNA

<213> Homo sapiens

<400> 131

```

gaattcggcc aaagaggcct agcaatacat tcaataacat aactaaagaa cagaggccag 60
gcacagtggc tcagcctat aatgttttaa ggcactctgt attaccttt tgcatttctt 120
gagaaagact gtctaaagaa aaccacctga taaatgatga ataaatattt ttaatgaatc 180
tgtaggaaaa aagattactc ttaaaatgat ctacatttga aaaatttcaa tacattcaat 240
aacataacta aagaacagag gccaggcaca gtggctcacg cctataatcc cagcactttg 300
gaaggctgag atgggctgat caagaggtca ggtgttcaag accagcctga ccaatatggt 360

```

gaaaccctgt ctctactaaa aatacaaaaa tcagccagtc atggtggtgc gcacctgtag 420
tcccagctac ttgagaggac tcgag 445

<210> 132
<211> 450
<212> DNA
<213> Homo sapiens

<400> 132
gaattcggcc aaagaggcct agattcattt aaaggattta caaattcatc aacccttgaa 60
aactaaagca aattgaacag gaaaaaaaaa agaagatgg gttttttaag tccaatatat 120
gttattttct tcttttttgg agtcaaagta cattgccaat atgaaactta tcagtgggat 180
gaagactatg accaagagcc agatgatgat taccaaacag gattcccatc tegtcaaat 240
gtagactacg gagttccttt tcatcagtat actttaggct gtgtcagtga atgcttctgt 300
ccaactaact ttccatcatc aatgtactgt gataatcgca aactcaagac tatcccaaat 360
attccgatgc acattcagca actctacctt cagttcaatg aaattgaggc tgtgactgca 420
aattcattca tcaatgcaac ccatctcgag 450

<210> 133
<211> 322
<212> DNA
<213> Homo sapiens

<400> 133
gaattcggcc aaagaggcct aagctttctt ccttttgatt ctattccact gactgccttc 60
tgtttacaca atgagagtga tgctttcatt ctttatcccc aaaccaatca ggatcagatt 120
tgcaaaactca tcaggaaaaa atggaagaaa agggagtcct ctgaaatcaa gacttttcta 180
ctgcttcagt aacattaaaa ataaacagct aggagagggt tttttgtttt tgttttgtt 240
tgtttttggc ttggggagtg tgggtggaag ggggttgtct aaatgggtgt caaggaaaat 300
caatacccaa ctaacactcg ag 322

<210> 134
<211> 422
<212> DNA
<213> Homo sapiens

<400> 134
gaattcggcc aaagaggcct agggtcacag ggtggttata tcacttcgca gcttttcctt 60
tctgaggcca gaaaaggaag gggtttgctt tctctagta tttattcttc tggactacat 120
caagtactct aagcctgatg ttaggcaata actgcccatt agccattggc tacatttgcc 180
tctttcttgt tccaacaata ttagtgatct gtggtacagg acacactctt tgtttgctag 240
ctacaaattc taacaagct aagttttatt catgtagtta ttcacaaatt aaaacaacac 300
acacaccaca cacacacaca cacacacaca cacacacata ccacaaaacc 360
cagagatcac caaatactat ataaataaac aagcccaaag tcacagatca gggacactcg 420
ag 422

<210> 135
<211> 308
<212> DNA
<213> Homo sapiens

<400> 135
gaattcggcc aaagaggcct aagtcacatc atctcatctg agttcttgca atagctccca 60
agttgggttt cttgcttcca tacttctctc tataaactgc tcttagcaca gcagccaaag 120
cagtgaataa aattaagctc atgccacttc tctgtcgaag cctcctttgg ctatgcgttt 180
tgctcagggg aagctggatc ccttacaatg ttgtacaggc cctacacaat ctgatccctg 240
ttacttctga ggctttatct ccaagtgcc tctcctctgc tcactctact cagccacacc 300
aactcgag 308

<210> 136

<211> 298

<212> DNA

<213> Homo sapiens

<400> 136

```

gaattcggcc aaagaggcct aaaagccttg gagatattga atcatgttac catttctggt 60
tttttccacc ctgttttctt ccatatttac tgaagctcag aagcagtatt gggctctgaa 120
ctcatccgat gcaagtattt catacaccta ctgtgataaa atgcaatacc caatttcaat 180
taatgttaac ccctgtatag aattgaaagg atccaaagga ttattgcaca ttttctacat 240
tccaaggaga gatttaaagc aattatattt caatctctat ataactgtca acctcgag 298

```

<210> 137

<211> 372

<212> DNA

<213> Homo sapiens

<400> 137

```

gaattcggcc aaagaggcct accctcttga ccccttaggt ttgattgcc tttccccgaa 60
acaactatca tgagcgcgag gctgccggtg ttgtctccac ctcggtggcc gcggctgttg 120
ctgtgtctgc tgctcctgct gggggcggtt cctggcccg gcggagcgg cgctttctac 180
ctgccccggc tggcgcccg caacttctgc gacgaagaaa aaaagagcga cgagtgaag 240
gccgaaatag aactatttgt gaacagactt gattcagtg aatcagttct tccttatgaa 300
tacacagcgt ttgatttttg ccaagcatca gaaggaaagc gcccatctga aaatcttggt 360
caggcgctcg ag 372

```

<210> 138

<211> 190

<212> DNA

<213> Homo sapiens

<400> 138

```

gaattcggcc aaagaggcct actgtcttaa agaatttctt cctttggttt atttcatctt 60
tctactaggt cttttctctt agaattcaca cttgccctat tgtctcccat tttgaaaacc 120
ctgtcctttg acctgcatat tttctgttgc tgtcatgttt ttctattctc ttccacaggc 180
attactcgag 190

```

<210> 139

<211> 204

<212> DNA

<213> Homo sapiens

<400> 139

```

gaattcggcc aaagaggcct acgagccggc agttgacatt tccaaatata aaatcgtgca 60
ttacagatgc tctctggatt gcccagattt ctgttccaac gcagccactt tccattttta 120
ttttttatta ttcttttgaa acagagtctt gctctgtcac ccaggctgga ggcagggtcta 180
gaattcaatc gggttctccc tata 204

```

<210> 140

<211> 329

<212> DNA

<213> Homo sapiens

<400> 140

```

gaattcggcc aaagaggcct agcagtgagc tgagataacg ccagtgcatc ccagcctggg 60
cgacaggggtg agactcttga ctaaacaaca acaaaaacaa caacaacaaa attaggaata 120
gagatctcgt tttgagagaa tttgagacct gttatctctt agtttttgcc ttttttccct 180
ctatctcaga ggaagccaat atctactgtt tgatgttagc tatctttaac atcattttta 240
aaaaaacctt attatttaga agtatggtag atatatataa atttttacc ttttttttgc 300
taactgaaaa tatatgcgta gccctcgag 329

```

<210> 141
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 141
 gaattcggcc aaagaggcct actcatccaa attgcttagt tccctctatt catgtacatg 60
 tggatgggtac cattcatgct ttattactca tacgaaaatt tcggctttat ccttgactct 120
 cctctctcct cgttacccac atcccattag tctctatcta gtattttata taaccatccc 180
 ctcatctcca ttctactcc ctttacccta tgaaggccct caccattctt tccactagt 240
 attgttatag ctgtttaaact gtttttattc tctgtctca agtctcattt tgctccaata 300
 taacttccat atttttgcca aaacaatctg tctatacact cgag 344

<210> 142
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 142
 gaattcggcc aaagaggcct aatgtaacaa acctgcacgt tgtgcacagg taccctagaa 60
 cttaaagtat aatttaaaaa aaaaattttt tttaagtata aacccaaaac aactgtctta 120
 aaatacagtg actcaaaata catgccccaa tgagttagta ctcccaaato tggctaata 180
 ctggaatgac ctaagaaccc tttttttcag tctgataga ctctatctcc agggctagag 240
 gcctaggcat ctgcatttta aagttcccca catgagtctt acggccaggc aagtttagga 300
 accccagctt aatgtatctg ttgtctcgag 330

<210> 143
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 143
 gaattcggcc aaagaggcct aatctgagtt tgtttttcaa agatcactaa attttagtta 60
 tgattatata acattttcca aaatgtgttg cagtttttgc cctccttgct ctgagtgttg 120
 gtgcactgga cacttttatt gctgcagtat atgagcatgc ggtgatatta ccaaacagaa 180
 cagaaacacc tgtttcaaaa gaagaagctt tgctcctgat gaacaagaac atagatgttt 240
 tggagaaagc agttaagctg gcagctttac tcgag 275

<210> 144
 <211> 290
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (152)

<400> 144
 gaattcggcc aaagaggcct actagacctg ccacaagtcc aaactcctag ctttaatttt 60
 gagtgttttt aacaaaactgg cctctgttta tcattgtttc ttctagtact tccccaagga 120
 tgattgtacc ctgagcactc aagaccgctt gntgttcccc tacacacttt ttgttcaagc 180
 tgtttgtttt acctggaatg ctgtctttgc accttcttcc tggacctggt tcaactctgt 240
 tgcccaggct ggagtgcaat ggcgcgatct cggcacactg caacctcgag 290

<210> 145
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 145

```

gaattcggcc aaagaggcct acagagagggc tgagaccaac ccagaaacca ccacctctca 60
cgccaaagct cacaccttca gcctccaaca tgaaggtctc cgcagcactt ctgtgggtgc 120
tgctcatagc agttgccttc agccccagg ggctcgctgg gccagcttct gtcccaacca 180
cctgctgctt taacctggcc aataggaaga tacccttca gcgactagag agctacagga 240
gaatcaccag tggcaaatgt ccccagaaag ctgtgatctt caagaccaa ctggccaagg 300
atatatgtgc cgacccaag aagaagtggg tgcaggattc catgaagtat ctggaccaa 360
aatctccaac cccaaacca ctcgag 386

```

<210> 146

<211> 133

<212> DNA

<213> Homo sapiens

<400> 146

```

gaattcggcc aaagaggcct agcagtgaat ggcacatggg atgtattcaa tgaacgttca 60
acaaatcttt gtttttatcc ttattattat ccttccttcc caccctctcc ttgctagaag 120
tcacaggctc gag 133

```

<210> 147

<211> 197

<212> DNA

<213> Homo sapiens

<400> 147

```

gaattcggcc aaagaggcct agccagtatt gtaatctaca actttttaa attcactcat 60
ctgtcaagaa gcccaagaac aatcacctct ctaagatctt cagaatacaa aaaatgtatt 120
gttttaagggt tttttttttt gggtttttgt tttttgggtt tttgagacaa ggtcttgctc 180
tgtcacccag tctcgag 197

```

<210> 148

<211> 446

<212> DNA

<213> Homo sapiens

<400> 148

```

gaattcggcc aaagaggcct agtttctggg ggtaaagaaa gatgaagacc tcttcggga 60
atggctgaaa gacacttggt gcgccaacgc caagcagtc cgggactgct tcggatgcct 120
tcgagagtgg tgcgacgcct tcttgatgag ctctctggga agctctcaat cccagccct 180
catccagagt ttgcagccga gtagggactc ctccctgtc ctctacgaag gaaaagattg 240
ctattgtcgt actcacctcc gacgtactcc ggggtctttt gggagttttc tcccctaacc 300
atttcaactt tttttggatt ctgctcttg catgcctccc ccgtcctttt tcccttgcca 360
gttccttggt gacagttacc agctttcctg aatggattcc cgccccatg cctctttggc 420
cgattgaatt ctgacctgc ctcgag 446

```

<210> 149

<211> 422

<212> DNA

<213> Homo sapiens

<400> 149

```

gaattcggcc aaagaggcct aaaaagctca acttgaagct ttcttgctg cagtgaagca 60
gagagataga tattattcac gtaataaaaa acatgggctt caacctgact ttccaccttt 120
cctacaaatt ccgattactg ttgctgttga ctttgctgct gacagtgggt ggggtggcca 180
ccagtaacta cttcgtgggt gccattcaag agattcctaa agcaaaggag ttcatggcta 240
atttcataa gacctcatt ttgggaagg gaaaaactct gactaatgaa gcatccacga 300
agaaggtaga acttgacaac tgtccttctg tgtctcctta cctcagaggc cagagcaagc 360
tcattttcaa accagatctc actttggaag aggtacaggc agaaaatccc aagtttctcg 420
ag 422

```

<210> 150

<211> 300

<212> DNA

<213> Homo sapiens

<400> 150

```

gaattcggcc aaagaggcct aaactataga tacgactcta aggaccatcc cataagtagg 60
gcacataggg aatagaattc ataccagaat tttaggattt tattttacct tctaataatat 120
aattagttct aaatgtgtgt taaccctttt ttcccccaat ttaagggttt gtgttttcat 180
atcttatctt ttgggattgc tttataata atgaactctt cctgtatagg tatgaaatca 240
ccagaagaac aactgggtgtg tgtgccacca caggaggcct ttcctaacga cgccctcgag 300

```

<210> 151

<211> 374

<212> DNA

<213> Homo sapiens

<400> 151

```

gaattcggcc aaagaggcct atattattta cctctgttac cctgtaggtc tctaaacttt 60
taagtagact tattttttta aaagctacta tactcccttc tttctgaatc aaaaacattc 120
agagataaga attagatgga agtaaagctc cctgtgggtt gtgctccatc acaatttttt 180
tttttttttt tttttttttt ttagtagagg cagggtttcc ccatgttggc caggctagtc 240
ttgaactcct gacctcaggt gatccccctg cctcggcctc ccaaagtgtc gggattgcag 300
gggtgagcca ccacgcccag ccttcacac agttttttat ggaaacagaa tacaaagcag 360
caaggcagct cgag 374

```

<210> 152

<211> 347

<212> DNA

<213> Homo sapiens

<400> 152

```

gaattcggcc aaagaggcct aaaataagaa tatgaaaagt tgctcaatgt cattagctaa 60
ttgggaaatg caaattaata cctcaatgaa tatcactaca tacacaccag aatggccaaa 120
atttaaataa ctgacaatat caagtgttgg tgaaaatgtg gaagatctga aatgctcata 180
cattgctggt aagaatgtaa aatggtacag acacattgga aaaataattt ggcaatttct 240
ttaaaagtta aacattactc aacaatgaaa atataatatt attgatacac agcaacttgg 300
aggaatctct aatgctttat actgagttga aagaagctag tctcgag 347

```

<210> 153

<211> 222

<212> DNA

<213> Homo sapiens

<400> 153

```

gaattcggcc aaagaggcct attgaattct agacctgcct cgaattgtcc aaggaattga 60
atggggagct ggtgcatttg tacactactt ctgttgctca ctgatgggca acagggtttt 120
tatccccagc ctttccaggc tgccccggg agacagcagc tatggggagg caccaacca 180
tgggctgtac tcattccaga atccttcctc cctcactcag ag 222

```

<210> 154

<211> 458

<212> DNA

<213> Homo sapiens

<400> 154

```

gaattcggcc aaagaggcct agcctcgagt gacttggatt ttagtgggtat aaccacagaa 60
atgtgtttta cctttcaggc tgcaggaaat ctgcagccat tctcccagcc aagttcgaca 120
cctatcttca ccaatatgag tagaattcag gccacggaga taacaagcct ataccactca 180
gaacagaaat ggtccttaat aatcatagaa tgattatgcc aaggaaatgg aaatccacaa 240
acaatcctaa atctccttta aataagttac aatctcaccg ggcacgggtg ctcgtgcctg 300

```

taatcccagc actttgggag actgaagcag gaagattgct tgagaccag agtttgagac 360
 caccctgggc aatatagcaa gaccgcctc tgcaaaaaa attaaaaact tagctgggtgg 420
 tgggtgcctg taatcccaac taccgcgtgg ggctcgag 458

<210> 155
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 155
 gaattcggcc aaagaggcct atggaaaaca tgttccttca gtcgtcaatg ctgacctgca 60
 ttttcctgct aatatctggt tctctgtgagt tatgcgcga agaaaatttt tctagaagct 120
 atccttctga tgagaaaaag caaaatgact cagttattgc agagtgcagc aatcgtcgac 180
 tacagggaagt tccccaaacg gtgggcaaat atgtgacaga actagacctg tctgataatt 240
 tcatcacaca cataacgaat gaatcatttc aagggtcgca aaatctcact aaaataaatc 300
 taaaccacaa cccaatgta cagcaccaga acggaaatcc cgggtactctc gag 353

<210> 156
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 156
 gaattcggcc aaagaggcct aagttagtaa gggatattta tagatttttt aaaatgctta 60
 gtgcacccctg ctatttcctc attatatgta tgtctaggtt tggtaagac catgccaggt 120
 caaaccttat ttggaatttc aaaacacgag aagaactgaa agatactctt gaatctgaaa 180
 tgagagcatt taatatgac agagaacttg gaagtgcata tgtgatctcc tggaaccacc 240
 atgagtttga ggttaaatat gagctgctcg ag 272

<210> 157
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 157
 gaattcggcc aaagaggcct aaggatatata aaagtcctag cacagagcgt gtcataataat 60
 atggcttcac aagtaccctc atctcctttc cagtcgtttt ttgtttttgt ttttgttttt 120
 ttgagaccat ctcactctgt tgcccagget ggagtgcctc ttcattttta tttctttatt 180
 cagcaagtat tgatcaaatg tgctttgtac caggtactga gctcttcgtt gggatataat 240
 ggtgatcaag gagattgtag attctggcag ggaaaactga catcaaacac gacgaccccg 300
 acctgcctcg ag 312

<210> 158
 <211> 445
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (68)

<400> 158
 gaattcggcc aaagaggcct agtctgctat gctttagtag cattctgtgt gtctttttgt 60
 caaagctntt aaaacgtatc attgtcctta ccaatcccca ctggactgta agcactctga 120
 gaatgggcac tctttctttt ctgtcgccag tgtctggcac gtagtagctg ttcagtaaatg 180
 ctgagtatga caaactgtat tagtcatata gattacccaa gtgtatcttg gcacctaaaga 240
 aaatgagtag gcaatgtgag gtgagtatac tttgaataat cttgaaatgc actacagtca 300
 catatgcacg tatgatttct gttatttggg taattctggt ggatgattat ttactatgtg 360
 aaaatattgt cataaaatgt atgacacttt tattccttat tagattatgt tatatgtttc 420
 atagaatgat accgcttttc tcgag 445

<210> 159
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 159
 gaattcggcc aaagaggcct accagcaagg attggaaatc aacaagacaa ctgaatgaaa 60
 ctcagggtctg ttttctctcaa agtgtgggtcc tgggttcagg tgctcacatc ggaattacat 120
 aattgtgcaa aacttggact gccctgtgtc cctagagacc tcgag 165

<210> 160
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 160
 gaattcggcc aaagaggcct agagtaataa gtactgggac aataacaact acataactaat 60
 tattccaaac attaaagaac agagggttttt tgttttttgt tttctagtag aaaaacctaa 120
 gtttagaggt cccaactttc atttttttct aatataattg agcaaaagca caacaaaaat 180
 gaatatatga tgttgatttt tgggtctcatt ttattttttt cttctttttt tcccactcat 240
 ggtactactg tgcattgtga caggctcgag 270

<210> 161
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 161
 gaattcggcc aaagaggcct atgagaagag tggcgtagtt ttacattttt cctaaatctc 60
 ctttaaggctt gccttaatat aaagcatcag ctggcttctg cattctgtcg acagggatat 120
 gttgggggtt ttttggtttt tgttgctgtt gttttttgag acggagtctt gctctgtcgc 180
 ccaggctgga gtgcagtggc gctatctcgg ctactgcaa gctccgcctc ccgggttcac 240
 gccattctcc tgcctcagcc tcccagtag ctgggactac gggcgctcgc caccacacct 300
 ggctaattat tttgtatttt tagtgggact cgag 334

<210> 162
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 162
 gaattcggcc aaagaggcct actgaataac ataattgtgc cctttattaa gttgttacta 60
 ttattatttg tggagacggg gtctcactct gctgccaggc tggagagcag tggcgtgatc 120
 atagctcact gcgggctcaa gggatcctcc tgcctcagcc ccagttgcc aggactcgag 180

<210> 163
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 163
 gaattcggcc aaagaggcct aaaaatatat tttttactct gtgtcctcaa ttcccaggac 60
 aatgtctgtt cgacaaaagg tgagcgtcga gtgtttgggg ttttttgttt gttttttgta 120
 ttttttgaga cagggtctcg cttttgccacc caggctggag tgcagtgggt cacacatggc 180
 tctactacagc ctctacctcc cgggctcaag ggatccctcc acctcagcct cccatgtagc 240
 tgggactaca ggtgtgcacc atcacacca gctaattttt gtattttttg tagagacgga 300
 actcgag 307

<210> 164
 <211> 361

<212> DNA

<213> Homo sapiens

<400> 164

```

gaattcggcc aaagaggcct agaaattaaa aagtcattca acttatagtt caggagagcc 60
attctttcat tgctcatctt ttgccttttt caaaatgagg ttgaccacag atgagtctag 120
ggaggggaat gacgtgggga tcgtgacttc tgcaggggta gtcttttcca cttttccct 180
gtccatctgt tttttcttct tcttttcttt ttttctgaaa gagactctcg ctctgttgcc 240
caggctagag tgcagtgga cgaatcatag tcaactgcag ctccaactcc tgggcgcagg 300
tgatcctcct gcctcagctc ctgagtggtt gggacaaacg gcacatgtca ccactctcga 360
g                                                                 361

```

<210> 165

<211> 357

<212> DNA

<213> Homo sapiens

<400> 165

```

gaattcggcc aaagaggcct atgtgtatgg tatctgtgtg aattttgact gtttctcccc 60
tctcttcttt agtcattacc cctgtttttg gttcattcct atcagtaaac aatctctggt 120
agagacttgg taagaaaact caaccattcc cttaaaaaaa gtcagcctct acccttccct 180
tagccagatg cttcagggat ggtctgcttg caacacttcc tgtccttcac cttctttcaa 240
ctgtttaacc tgccttattc ttttttttgt gagacggagt cttgctctgt ctcccaggct 300
ggagtgcagt ggcgcagtgt ggctcactgc aagctctgcc tcccgggttc actcgag 357

```

<210> 166

<211> 149

<212> DNA

<213> Homo sapiens

<400> 166

```

ctcgaggatg tgccgtactg cctttaatat gtgcatgagt tactcatggg gaaaatgcct 60
tccctttctt tctttatact tttttttttt ttttgagatg aagtttcact cttgtcacc 120
agactcgagg caggtctaga attcaatcg                                                                 149

```

<210> 167

<211> 410

<212> DNA

<213> Homo sapiens

<400> 167

```

gaattcggcc aaagaggcct agaataattc accagtaaaa ctgttcaggc ctggtgtttt 60
ctgttttaaa aggttaataa ctgttgattc aattttctaa tagatacaga tctattcaga 120
ttattgatat agtttcttta atagttaaca ggtttggtca ggttatctgt ttttctttgt 180
gagaactttg gtagattgtg tctttcacag aatattggct tatttcattc tactaaattt 240
ttggtgtaca gagttgttca tagtattcct ttgttgtagt tttaatgtac ttgggataag 300
taatgatgac ccctcttcca tttgtttacat tagtaatttg tgccttctct ctttttcttc 360
ttttgttttt ttggagacaa agagtctcac tgtcaccag gcgactcgag                                                                 410

```

<210> 168

<211> 369

<212> DNA

<213> Mus musculus

<400> 168

```

gaattcggcc aaagaggcct agatatttga aagacgagtt tgttctacct agcaccctag 60
ctctagctct gtcagatacg ttaatgcata catcctctct aatgcatggt catttattgc 120
tgcagtttgg ttcttctgga gtattttcat catttagcta ttggaataca attatgaaaa 180
ccaactgttg aacatacttg gagtagctgt ttctttccta aagaaccaa gttgttttca 240
gctaatagaa caggttgaag tccgcctgca ttagctgtgt tttccctcat cttgttagag 300

```

ggatgcacag ggcacgggtga catcatttcc ctcattgtgt tagagggatg cacagggccc 360
 ggtgtcgag 369

<210> 169
 <211> 455
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (29)

<220>
 <221> unsure
 <222> (38)

<220>
 <221> unsure
 <222> (60)

<220>
 <221> unsure
 <222> (399)..(402)

<220>
 <221> unsure
 <222> (408)

<220>
 <221> unsure
 <222> (423)..(425)

<220>
 <221> unsure
 <222> (444)

<400> 169
 gaattcggcc aaagaggcct agagctttta aagtagangg tagggcgctt tctaattctn 60
 attatttgat ccaaatgtgt aaaacagtag ctctagactg gtgaagcatt tgggacacag 120
 ttggacattt taaaagccat ttctcaagct ttaagacatt tagtacagcc ttgcagtgcc 180
 tcagcagagg cgcgaaatgca agcagaggcg cggccatgag gtcgggtgtcc gacactggcc 240
 gtggctggag agatgcagta atacttggtg agtgtgagca gcagtggata ggacacgtga 300
 cgtgcacggt gccttgggag agcatgggct ggtcctgcag gactctgcat ctcaactgtga 360
 ctgtgcagca cattttaggc tgtgtttgaa tgtctcacnn nntactgntt agttgtcgaa 420
 tgnngaatac caagaaggag ctgngccagg tcgag 455

<210> 170
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 170
 gaattcggcc ttcatggcct agatctgggt tgggttttct tttttaatta tccaaacagt 60
 gggcagcttc ctccccaca cccaagtatt tgcacaatat ttgtcgggg tatgggggtg 120
 ggttttttaa tctcgtttct cttggacaag cacagggatc tcgttctect catttttttg 180
 ggggtgtgtg ggacttttca ggtcgtgtcc ccagccttct ctgcagtccc ttctgccctg 240
 ccgggcccgt cgggaggcgc catggctcgg atgaaccgcc cggccccggt ggaggacctg 300
 aagaagtacg gggctaccac tgtggtgcgt gtgtgtgaag tgacctatga ctctcgag 358

<210> 171

<211> 415
 <212> DNA
 <213> Homo sapiens

<400> 171
 gaattcggcc ttcatggcct acaagaagat ggtgtttctg cccctcaaat ggtcccttgc 60
 aaccatgtca tttctacttt cctcactgtt ggctctctta actgtgtcca ctcccttcag 120
 gtgtcagagc actgaagcat ctccaaaaacg tagtgatggg acaccatttc cttggaataa 180
 aatacgactt cctgagtacg tcatcccagt tcattatgat ctcttgatcc atgcaaacct 240
 taccacgctg accttctggg gaaccacgaa agtagaaatc acagccagtc agcccaccag 300
 caccatcacc ctgcatagtc accacctgca gatattctagg gccaccctca ggaagggagc 360
 tggagagagg ctatcggaag aaccctgca ggtcctggaa cccccccgc tcgag 415

<210> 172
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 172
 gaattcggcc ttcatggcct agcacgctgc cacacctagc tatgtatttc ttttttattg 60
 ccaagtattc cattatatgg atagaccaca tttatttagc cattcatcag ttgggtggaca 120
 tttggaccac tcagtttttt acttccaagc ataaaagtct atgaagataa agtgattaaa 180
 gatgtttttt aaatgtgatt ttttaaaaag tgacattatc agtataatct atttcagcat 240
 atcaagtaat aattatcaat aaaaattcaa aaaccgtctt ttttacagat actcgag 297

<210> 173
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 173
 gaattcggcc ttcatggcct aactgaaag ctagaaaaca atagagaagt atcttcaggc 60
 ttctgaggga aaattgtttc caaactagac caaacttata aaatctaaga tagaataaag 120
 acattttcag atatgcgagt ccttccaaaa tttatccctt atgtacttgc tctaaggaag 180
 ctacttgatg tacaagcaa gaaagtggaa gataatggaa tttgggaaat gggcacttca 240
 acacaagatg acacgacctg cctcgag 267

<210> 174
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 174
 gaattcggcc ttcatggcct aagcagaggc aaaagaatta accagctctt cagtcaagca 60
 aatcctctac tcaccatgct tcctcctgcc attcatttct atctccttcc ccttgcatgc 120
 atcctaataa aaagctgttt ggctttttaa aatgatgcca cagaaatcct ttattcacat 180
 gtgggttaaac ctgttcacg acacccagc agcaacagca cgttgatca agccagaaat 240
 ggaggcaggc atttcagtaa cactggactg gatcggaaaa cactcgag 288

<210> 175
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 175
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 gcctgaaaaa tcagcagaca tgattgaaga aggggagctt atcctatctg tgaatatctt 120
 gtaccctgtt atatttcata agcacaaaaga acacaaacca taccaaacaa tgctgggtgt 180
 gggcagtc aaactcacac aactgaggga ttcaattcga tgtgtcagtg acctccagat 240
 tgggtgtgaa ttcagcaaca ctctgacca agcccctgag cacatcagca aagtaagggtg 300

atttcctccc ataaaacaaa aggaaataac aagctaagaa aatagcgatt actctagctg 360
gttcataaat gtcccagtaa atccttttct tctcctgcgg gattccatca aactaccaca 420
ctatctcgag 430

<210> 176
<211> 317
<212> DNA
<213> Homo sapiens

<400> 176
gaattcggcc ttcattggcct agagactctc agcaccctgc gatatgcaag ccgagctcag 60
cgggtcacca cccgaccaca ggcccccaag tctcctgtgg caaagcagcc ccagcgtttg 120
gagacagaga tgctgcagct ccaggaggag aaccgtcgcc tgcagttcca gctggaccaa 180
atggactgca aggcctcagg gctcagtggg gcccgggtgg cctgggcca gcggaacctg 240
tacgggatgc tacaggaggt catgctagag aatgagaggc tcaggaaaga aaagagccag 300
ctgcagaata gctcgag 317

<210> 177
<211> 349
<212> DNA
<213> Homo sapiens

<400> 177
gatgggactt aagttgaacg gcagatatat ttcactgac ctcgcgggtgc aaatagcgta 60
tctggtgcag gccgtgagag cagcgggcaa gtgcgatgcg gtcttcaagg gcttttcgga 120
ctgtttgctc aagctgggag acagcatggc caactacccg cagggcctgg acgacaagac 180
gaacatcaag accgtgtgca catactggga ggatttccac agctgcacgg tcacagccct 240
tacgggattgc caggaagggg cgaaagatat gtgggataaa ctgagaaaag aatccaaaaa 300
cctcaacatc caaggcagct tattcgaact ctgcggcagc tggctcgag 349

<210> 178
<211> 576
<212> DNA
<213> Homo sapiens

<400> 178
gaattcggcc ttcattggcct agtaaaactct gaccagagat gacatctggt cccacaactc 60
atcagggtcta tgtacaatat ttcacatacc acccaataga taagataata ttaacagcaa 120
ccattctcct ttatcaattc cccctgctcc aatacaacca ccacacattg cattaatacc 180
ccaaacccat tcccaattta ttaaatatgg tgcaagctca tagacactta gaagaggcaa 240
atctagtgtg gatgaagagt tcctagagct ctgggagcca agatggagggt tttccagtac 300
ctgcacatgt ggctcaggag gatgctgcc aggagctaag gaggttgggag agcaaactg 360
ggaggtagaa gtcagatggc ccagctcagg gagctatctc tctcagcatc tcagctttga 420
gactctgcca ccacctctc ccagcccaag ctgctgccta aaccaggcat gttgaagggt 480
gagcagtggt tgccatgaag ccaagacca gagattgctg agactccac tcccctcct 540
cagactctag gcctgtgaca agccacacta ctcgag 576

<210> 179
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (57)

<400> 179
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attctataag cgtatcttga acaaaccagt tggactcaag gatttagaat ctattgatcc 120
agaattttac aattctctca tctgggttaa ggaaaacaat attgaggaat gtgatttga 180

aatgtacttc tccgttgaca aagaaattct aggtgaaatt aagagtcatt atctgaaacc 240
 taatgggtggc aatattcttg taacagaaga aaataaagag gaatacatca gaatggtagc 300
 tgagtgaggg ttgtctcgag 320

<210> 180
 <211> 583
 <212> DNA
 <213> Homo sapiens

<400> 180
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 ttacatttcc agggtcagaa acttggaac agttttccta gactgactca gacacaccac 120
 agtaacaact ctgcctgcaa ttttatttta atttgagaaa taaagatttc ctccaagcca 180
 catgaggact ctggcaccac ccacaaagc aagacctgta ttataagcc gagggctcag 240
 ggagcctaac tgcgggaccc gtcaggggccc cgtgacctat ccccgcccc accccccct 300
 ccaccgctgg gcccatcagt gtgtgttggg gggatgcttg gcagctgggg gtgaggagac 360
 aacaaacctc ggaactgga gccagagctg cggcctgact gacgcctttt gatgctcacg 420
 ggaaatttct gcccaggatc tcagccccag gctggttgtt tctacaaatc tctctcaaat 480
 gtattatttt ggtgacaaaa atgaaggagc tttgtaaatt tttttaaaat tatgaatcat 540
 atcaagtagt tgtttacatt tcttgaaaaa agagcaactc gag 583

<210> 181
 <211> 280
 <212> DNA
 <213> Homo sapiens

<400> 181
 gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
 accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240
 ttatcgttct gaaatcacat actgccggag gctactcgag 280

<210> 182
 <211> 280
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (272)

<400> 182
 gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
 accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240
 ttatcgttct gaaatcacat actgccggag gntactcgag 280

<210> 183
 <211> 280
 <212> DNA
 <213> Homo sapiens

<400> 183
 gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
 accaattggt cgaaaagatg aagcagatct tgcaaaatca gctttggcca tggcggattc 180
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240
 ttatcgttct gaaatcacat actgccggag gntactcgag 280

<210> 184
 <211> 280
 <212> DNA
 <213> Homo sapiens

<400> 184
 gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
 accaattggt cgaagaagatg aagcagatct tgcaaatca gctttggcca tggcggattc 180
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240
 ttatcgttct gaaatcacat actgccggag gctactcgag 280

<210> 185
 <211> 280
 <212> DNA
 <213> Homo sapiens

<400> 185
 gaattcggcc ttcattggcct acaagattgg caagatgctt atttttggtg ccatatttgg 60
 ctgccttgac ccagtggcaa cactagctgc agttatgaca gagaagtctc cttttaccac 120
 accaattggt cgaagaagatg aagcagatct tgcaaatca gctttggcca tggcggattc 180
 agaccacctg acgatctaca atgcatactt aggatggaag aaagcacgac aagaaggagg 240
 ttatcgttct gaaatcacat actgccggag gctactcgag 280

<210> 186
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 186
 gaattcggcc ttcattggcct agttatgctt gaatttgacc ctggcattat gatgttagct 60
 ggttattttt ctctgttagt gatgcagttt ctccctggca tcaatggaat ttacaatttg 120
 tcatgttttg cagtggctgg tatcagttgt tcctttctat gtttatagtg ctcccttcag 180
 gagctctttt agggcaggcc tgggtgtgac aaaatctctg agcatttgct tttttgtgaa 240
 ggattttatt tctccttcac ttatgaagct tagtttggtt ggatatgaaa ttctgggttg 300
 aaaatttatt tctttaagaa tgctgaatat tggccccctt aggccatgaa ggccgattga 360
 attctagacc tgctctgag 379

<210> 187
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 187
 gaattcggcc ttcattggcct agctccactt tctctgaaaa tttattcata ttgttaatta 60
 aatttgtttt tattatagaa ataatatatt gcatgatttg taaaaatgca gaggaacaga 120
 atggcacaaa attatgtaac cctttctatc tccccttggt gtacctcctt aatcatactt 180
 ctcagaacca ttgtcaataa tttgctggga gttcttctga tggttacat cgtgactgat 240
 agattttatt cccaggttca agcggttccc ctgcctcagc ctcccagta tctgggacta 300
 caggcatgca ccaccactca gctcgag 327

<210> 188
 <211> 379
 <212> DNA
 <213> Mus musculus

<400> 188
 gaattcggcc ttcattggcct aattatgaaa agtattcctt tatactgtaa gtagtttagg 60
 aaactattaa tttttatgaa taatagaact tccttctgag gttttgattt aatcaagaag 120
 aacctggaca ttttgttgct attatagtat gttctataat ttgaaagctg ccttacttca 180

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tttatttgta atgtttttat tattacattt ccttttttac agtccagctg tatcttccct 240
cccagtcccc cctcacacag ttccatcccc tgtctccaag ataatggccc cttaccaggt 300
ctccccactc cctggggtgt caagtctctc aagggttagg tgcacatctt cttccactga 360
gaccagaaca aggctcgag 379

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<210> 189
<211> 301
<212> DNA
<213> Mus musculus

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<400> 189
gaattcggcc ttcattggcct acccttctct gaggatggac acttctcaca ctacaaagtc 60
ctgtttgctg attcttcttg tggccctact gtgtgcagaa agagctcagg gactggagtg 120
ttaccagtgc tatggagtcc catttgagac ttcttgccca tcaattacct gccctaccc 180
tgatggagtc tgtgttactc aggaggcagc agttattgtg gattctcaa caaggaaagt 240
aaagaacaat ctttgcttac ccatctgccc tcctaattatt gaaagtatgg agtgcctcga 300
g 301

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<210> 190
<211> 317
<212> DNA
<213> Mus musculus

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<400> 190
gaattcggcc ttcattggcct aaagaaacct ggataacatt gtcttgcaac agcctagaat 60
aggtagcaaa aggaaatcta agaaagatgt ttatacaatc tttgatgcag aggtggagag 120
cacaagtcca aagtcggaac aggattcggg aattctggat gtggaagacg aggaagatga 180
tgaagaggta cctggggctc aagacttggg ggatttctct cctgtgtatc ggtgtctaca 240
catatattct gtcctgggtg cccgtgaaac atttgagaat tactaccgaa aacagaggcg 300
aaaacaggcc cctcgag 317

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<210> 191
<211> 295
<212> DNA
<213> Mus musculus

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<220>
<221> unsure
<222> (215)

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<220>
<221> unsure
<222> (222)

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<220>
<221> unsure
<222> (233)

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<220>
<221> unsure
<222> (237)

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<220>
<221> unsure
<222> (241)

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<220>
<221> unsure
<222> (245)..(246)

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<220>
 <221> unsure
 <222> (249) .. (250)

<220>
 <221> unsure
 <222> (253)

<400> 191
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 tcttttatca ttaaaagaag aatgggagcc gggcgtggtg gcgcacgcct ttagtcctag 120
 cactcgggag gcagaggcag gcagatttct gagtttgaga ccagcttggg ctacaaagca 180
 agttccagga cagccagggc tacacagaga aatcntgtct cnaaaaacaa ganaganaga 240
 nagannnann ganagagaga gagagagaga gagagagaga gagacacccc tcgag 295

<210> 192
 <211> 307
 <212> DNA
 <213> Mus musculus

<400> 192
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 caacaccatg aagctctgcg tgtctgccct ctctctcctc ttgctcgtgg ctgccttctg 120
 tgctccaggg ttctcagcac caatgggctc tgaccctccc acttctctgct gtttctctta 180
 cactctccgg cagcttcaca gaagctttgt gatggattac tatgagacca gcagtctttg 240
 ctccaagcca gctgtggtat tcctgaccaa aagaggcaga cagatctgtg ctaacccgtt 300
 gctcgag 307

<210> 193
 <211> 502
 <212> DNA
 <213> Mus musculus

<400> 193
 gaattcggcc ttcattggtag gccatggtga aatcactggt aaggagaaaa catctgaaat 60
 ggaattcaag tatctggtct tcattgtgct ttgtcaatac ctggacaata cgtttttctc 120
 agagacagaa gcaattacaa cagagcagca atcactgtct actttaatca caccgtcggt 180
 atatgtttaca actgattctc aaaacacagc agggaaatgct ttgagtcaga caacaagatt 240
 caagaacatt tcttctggac agcaagcatc acctgcccac atcactcctg aacaagcaac 300
 accagctggt tatgtctctt caagcccaact tacttataac attaccagac aagcagaatc 360
 agcggtcacac aactccttgc ctcaaacatc accatctggg ttcactttga ccaatcagcc 420
 atcaccttct acctataatt ctactggaca accacaaaaa catcttgtct atacttccac 480
 acaacagcca ccaatactcg ag 502

<210> 194
 <211> 427
 <212> DNA
 <213> Mus musculus

<400> 194
 gaattcggcc ttcattggcct acaagaggag cctagggagt ggcagctctc gctgaccggc 60
 ggggtcccaga gacctgcccc caaggtgtcc cactgtgtgg ctaaggggtg gatagaaccc 120
 gggctgggag agccgggtta tgggttccag tgggtgttcc gccgcttccct tgcttcgctc 180
 tgtcttacct cggcgttcag cctatttttc ctcgtaagaa ttggacactt ttccgtgccc 240
 cttccatacc gcaggtggtg ttctgtagagg ctctcacgct tttcaaaagg cgtctcatct 300
 aagatttggc agaaccaacc tgactaaagg agtcaccgtc atacccccct tgcacctgga 360
 gtaaatctga ctgtccgaag gacgaaggac cgggtctgtg gcacttgtgc taaggtggac 420
 gctcgag 427

<210> 195

<211> 197
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (28)

<400> 195
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 tcagagccca gagttttctg ttacaaggca acatgaagac tttgtgtggc tgcattgacac 120
 tcttactgaa acaacggatt atgctggcct tattatccct cctgctccta caaagccaga 180
 ctttgatggc cctcgag 197

<210> 196
 <211> 483
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (49)

<400> 196
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 ctctctctcc tggctctcag ctcaggggcc atttcccagg ctgtgtgtgac tcaggaaatct 120
 gcactcacca catcactcgg tgaaacagtc aactcactt gtcgctcaag tactggggct 180
 gttacaacta gtaactatgc caactgggtc caagaaaaac cagatcattt attcactggt 240
 ctaaatagggt gtaccaacaa ccgagctcca ggtgttcctg ccagattctc aggctccctg 300
 attggagaca aggtgcccct caccatcaca ggggcacaga ctgaggatga ggcaatatat 360
 ttctgtgtct tatggtacag caaccattgg gtgttcgggt gaggaaccaa actgactgtc 420
 ctaggccagc ccaagctctc gccatcagtc accctgtttc cacttcctc tgaagagctc 480
 gag 483

<210> 197
 <211> 364
 <212> DNA
 <213> Mus musculus

<400> 197
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 tgtcccagcc tcccagggcc tgcagtgcac gcagtgtgag agtaaccaga gctgcctggt 120
 agaggagtgt gctctgggcc aggacctctg caggactacc gtgcttcggg aatggcaaga 180
 tgatagagag ctggagggtg tgacaagagg ctgtgccac agcgaaaaga ccaacaggac 240
 catgagttac cgcattgggt ccatgatcat cagcctgaca gagaccgtgt gcgccacaaa 300
 cctctgcaac aggccagac ccggagcccg aggccgtgct tccccccagg gccgttacct 360
 cgag 364

<210> 198
 <211> 464
 <212> DNA
 <213> Mus musculus

<400> 198
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 agctcagggg ccatttccca ggctgtgtg actcaggaat ctgcactcac cacatcacct 120
 ggtgaaacag tcacactcac ttgtcgtcca agtactggg ctgttacaac tagtaactat 180
 gccaaactggt ccaagaaaaa ccagatcatt tattcactgg tctaataagg ggtaccaaca 240
 accgagctcc aggtgttcct gccagattct caggctccct gattggagac aaggtgccc 300
 tcaccatcac aggggcacag actgaggatg aggcaatata tttctgtgct ctatggtaca 360

gcaaccattg ggtgttcggg ggaggaacca aactgactgt cctaggccag cccaagtctt 420
cgccatcagt caccctgttt ccaccttcct ctgaagagct cgag 464

<210> 199

<211> 316

<212> DNA

<213> Mus musculus

<400> 199

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gattatacac cccttaactc ttaatttggg accatattga atggctctta tctgttctgt 120
tttaactctt ttctcctttc ttgtctgggc ttgacagtc ccatgtgaga catcctcgct 180
gcacccagc gtctctgact ctcttcatt ttccatcctt ttgtttcca tgctttcaac 240
tgacagtgtc ccttattccc atgcttctga ctctcactc cgtgtctccc aaccgctgt 300
acccgcttgt ctcgag 316

<210> 200

<211> 367

<212> DNA

<213> Mus musculus

<400> 200

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acttagtgac tgaattctca ggacatagtc ttggccctcc atttgcctcc ctccgcagag 120
tttgggtctc tcagttgtgt tctgaagatg tgagaacaat tttaggtgac agagtttga 180
ggaatttata agaaaacact gtctttgctc tgcttgcat ttagtgcctt ccttgacttc 240
tgactgggtc tcatcgga cctctatttc gtacatggcc ctgtttctcc atccttatca 300
cataggcacc tcagcagaag tgctatgaca taggattaca gcaacgatgg cctcatcaat 360
cctcgag 367

<210> 201

<211> 438

<212> DNA

<213> Mus musculus

<400> 201

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ctgacagacc ttccactgt acctgcagcc agcccttctc caaggatgga cacttctcac 120
gcgataaagt cctgtgtgct gatccttctt gtgacctac tgtgtgcaga aagagctcag 180
ggactggagt gttaccagt ctatggagtc ccatttgaga cttcttgccc atcatttacc 240
tgccctacc ctgatggatt ctgtgttgct caggaggaag aatttattgc aaactctcaa 300
agaaagaaag taaagagccg ttcttgccat cctttctgcc ctgatgaaat tgaaaagaag 360
tttatcctgg atcctaacac caagatgaat atttctgtt gccaggaaga cctctgcaat 420
gcagcagtc cactcgag 438

<210> 202

<211> 321

<212> DNA

<213> Mus musculus

<400> 202

gaattcggcc tcatggccta caaagtagag gaactgctaa agaaccctt gaagattcta 60
gtgctgatta actgcctggg catgtacgac tggccctgg ccaacaaatg cgtcctccac 120
atgttggttt ttggaaccac agttttcgtt tctggttctg agaagcattt caagtacctt 180
gagaagatct atagcctgga gatttttggc tgttttgctc tcaccgaact gagtcatggg 240
agtaatacca aggcctatgc aacgacagct cactatgac ctgatactca ggaattcacc 300
ttacattccc cggatctcga g 321

<210> 203

<211> 307

<212> DNA

<213> Mus musculus

<400> 203

```

gaattcggcc ttcatggcct acaaaattgg caagatgctc attttcggag ccatatttgg 60
ctgtctcgaa ccagtggcaa cactggcagc cgtgatgaca gagaagtctc cattcatcac 120
accaattggc cgaaaggatg aagcggacct tgcaaagtcg tctttggctg tggccgactc 180
ggaccacctc acgatctaca atgcttatct aggggtggaag aaagcccagc aagaaggagg 240
cttcgctctc gagatctcat attgccagag gaacttccta aacagaacgt cactgttgac 300
actcgag                                     307

```

<210> 204

<211> 278

<212> DNA

<213> Homo sapiens

<400> 204

```

gaattcggcc ttcatggcct aggacaactg gtaaaacttg aatggggtct gagaattagc 60
tggtagtaat gtatcagtgt taacatttta attttaatag ttttatattg tggttatata 120
ggagattatc ctggttcata ggaaatacaa agtttcaagg ggttgggact atcatatctg 180
caacttaatc ttgtgaaagg aaagtaagtc ttgggacccc aaaatcatta aactaaaggg 240
ataagtcaag ctggaaactg cttcgggtcaa acctcgag                                     278

```

<210> 205

<211> 436

<212> DNA

<213> Homo sapiens

<400> 205

```

gaattcggcc ttcatggcct acgaacagga gagactaccg gcgaagagga aatctttcct 60
gaaggaggag actgctgatg gataaatcct gggaaaaaat cagccaagtt cttcaagtct 120
ataacgtggc acctgatcct tgacctagct tgctgacatc ttttgaaagt gggtagagtc 180
tgcaagggtg agatcaagca ccagcagatt tgggtactat tgagggccta ttcctgggtc 240
atagatgtca ccttctggct gtttcctcac atgggtgatg gagcaagcta gccctctggg 300
gtctctttta taaagtctgg ccgggacctt caacaatata agagtcaggc taagcaactc 360
tttcgaaagt tgaatgaaca gtcccctacc agatgtacct tggaagcagg agccatgact 420
tttcactact ctcgag                                     436

```

<210> 206

<211> 467

<212> DNA

<213> Homo sapiens

<400> 206

```

gaattcggcc ttcatggcct acttcctgta attccagcac tctgaaaggc ccaggcagga 60
ggatcatttg agcccaggag tttgagacca acctgggcaa aagggaaga ctcagtctct 120
gccaaaaaaa aaaaaaatta gttgggcatg gtgctgcaca cttacattcc cagctactca 180
ggaggctaag gcaggagaat cccttgagcc ctggaatttg aggcagcagt gagctatgat 240
tgcaaacactg cactccagcc tgggcaacaa agcgagtccc tgtctcttaa aaaaaataa 300
acagaagtcc tagaaaagt tgggtgttga tttactttta cattaaaagt atatggcatg 360
ttgagcagcg taaatataga aaagtgtagg gaagactgag caggaagtac tcctttggga 420
ctgaaagacc tcaggaagtc ttattccttt gatggcacia tctcgag                                     467

```

<210> 207

<211> 260

<212> DNA

<213> Homo sapiens

<400> 207

```

gaattcggcc ttcatggcct agttttataa gccaatTTTT ggagtaaaaa gtgaagcatt 60

```

```

tgacttttca ttttcagaat ttgttccctt attgggcagc aaacctcagc ctcaatatgc 120
atattttctt gtattttctt tctatttttg gggacagtgt ctcattctgt caccaggt 180
ggagtgcagt gacacgatca tggctcactg aaacctcaac ttccctggct ctagtaatcc 240
tcccacctcg gcctctcgag                                     260

```

<210> 208

<211> 362

<212> DNA

<213> Homo sapiens

<400> 208

```

gaattcggcc ttcatggcct agttccccc caaattcatg cagatacaat tttggagagg 60
atttctctcc agctctagat ataggcctgt aggagcctgg tcattctgta tttcccttac 120
aaagaattct cgtagggtccc agaagtacct ggatgcttca tgaaatttta attggacatt 180
tcttaaaata tcaattcatt aaatcgtgtg tgcttattta catggtggat agttctacaa 240
tatggtcccc ttttctgccc ttgaaaacca tctttgtggc cgggcacggt ggctcatgcc 300
tgtaatccca acactttggg aggctgaggt ggggtgatca cctgggggta ggagttctcg 360
ag                                     362

```

<210> 209

<211> 328

<212> DNA

<213> Homo sapiens

<400> 209

```

ggagctgcgc atggatttta tattggaaga catggatctt gctgccaacg agatcagcat 60
ttatgacaaa ctttcagaga ctgttgattt ggtgagacag accggccatc agtgtggcat 120
gtcagagaag gcaattgaaa aatttatcag acagctgctg gaaaagaatg aacctcagag 180
accccccccg cagtatcttc tccttatagt tgtgtataag gttctcgcaa ccttgggatt 240
aatcttgctc actgcctact ttgtgattca acctttcagc ccattagcac ctgagccagt 300
gctttctgga gctcacacgg cactcgag                                     328

```

<210> 210

<211> 487

<212> DNA

<213> Homo sapiens

<400> 210

```

gatttgcaca gttcttgcca gaataaatgc cattatctgt atgtttcagg gagttcccca 60
atttgatcat ttttgtgtgt gtgtggtgtg tgtgtgagag agagagatac tgcagtaaaa 120
cattttctaaa ggatgaaagc tcttgtatgg catagatatg aattccttcc tctggtaata 180
attaggttat tcccagaagc acagtgtcat tctttaaata aaagctttcc tgtttaaagc 240
ttttcaaagg agcagaccac cttgaagatt ccccttaggg ttgatatgtg tctaattcat 300
tttataaaaa ttattcttgt cttcatttta aagctttggc tatatagtca gaaatgtcct 360
aaataacaaa ctattttgta ttttaatttag ggaagactaa aggggaagaaa aatgaaaact 420
cagtccttat gtaagctcca aggatattag ggcttaaagg gcttttctag ttttatgaga 480
tctcgag                                     487

```

<210> 211

<211> 390

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (108)

<220>

<221> unsure

<222> (121)

<220>
 <221> unsure
 <222> (137)

<220>
 <221> unsure
 <222> (357)

<400> 211
 gaattcggcc ttcattggcct agttttatat atatagatat atagatacac acacacacac 60
 acacacacac acacacacac acacacagat tctgaattat acatgganac acaaactaga 120
 ntggccaaaa caatttngag aaagaacaat aatttggagt actcctatta tctaattgta 180
 agaatgacta taaagctaca gtaatttagt ctatattgac aaaaggctag ccacaaacct 240
 atgaaacaga aacaagtcca gagatacacc cataaaaata tggtaaaactg atacttgaca 300
 tgtccaaaaa caatgaatgc aaaaaggata atcttttcaa caaatgggat tggaacnatt 360
 ggacattcac atactctccc cccctcgag 390

<210> 212
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 212
 gaattcggcc ttcattggcct aaattggcgg ggtgtggtgg cgcattgctg tgggtcccagc 60
 tacttgggag gctgaggtgg gaggatggcc tgggcccagg aggtggaggt tgcagtgagc 120
 cttgatagca ccactgcact ccagcctggg tgacggagcg agaccctgtc tcaaaacaga 180
 caaacaagca aaaaataggt taaagtcagg atttctactga ttttcttgct taataagttt 240
 tttaaaaacca cgatgctgca attttttccc tctcaagctt cttgaaaatg tgtgattttac 300
 cctttttttat ctattactcg ag 322

<210> 213
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 213
 gaattcggcc ttcattggcct aagaaaactt tcagccagaa atagccaaag tcaactcttg 60
 tcatcacacc aaactttgat tctcaccaca acacacattt cactctttga ttctcttttt 120
 tcccagttag ttgttggctg aatgatcagt ctatttattt tatatatatc taggcatcta 180
 catatccatt catctacttc tctttctatc cacctactta tgtatccatc catccatcca 240
 tccatccatc cattcatcca ttcaccattg aattctagac cagcctcgag 290

<210> 214
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 214
 tgaggagcat ggtcgccaat cccacagctc ctctctcttt gccagtggca ccttccagga 60
 cactgtggagg ttgctagacc tgggatccag ccttcttggg gtcacctccc aggggtgactc 120
 aactccagag ctcccagctc ctccagcagc cgacaggagg cccgtcaaga tgcaggcagg 180
 tattgccacc ccagggatga agacagcacg ctcgag 216

<210> 215
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 215
 gaattcggcc ttcattggcct actcttagat agaaaactgg accagcctct acggatgtcg 60


```

atgctctgtt tcttggtttt gcttctctgt aaatctgagg gagaagacag gaaggacctg 120
gggtgcagcc cttcttttgc tgtctcatag gagatcctca cctcactttg tgaaaaccca 180
tgctgtctgt aatgatccca aaagctgctg caaaatacct caatataaaa gacatgttaa 240
cctggacgtg gtggctcacg cctgtaatcc cagcactttg agaggccgtg gggggtggat 300
cacttctttg gtcacctgaa gtccaggact tcaagaccag cctgggcaac acggcaaac 360
cccatctcta ccaaaaaata caaaaattat tcaggcatgg tggatatgc atatagtccc 420
agctactagg acgaggctcg ag 442

```

<210> 216

<211> 313

<212> DNA

<213> Homo sapiens

<400> 216

```

gaattcggcc ttcattggcct actgaggcag gagaatggcg tgaacccagg aggcggggct 60
tgacgtgagc cgagattgcg cgactgtact ctagcctggg tgacagagcg tgactccatc 120
tcaaaaaaaa aaaaataaat aaaaaactaa atgttaaaag gagatttctt ttaatataga 180
aagtagtcgt ctttttttgt tattcttttt ttcttaatat gctttaagtt agtccataga 240
atggactttg ttcttttggg ggttaatagc taaaatattt aaagcaatga aactgaaagg 300
gtcagtactc gag 313

```

<210> 217

<211> 284

<212> DNA

<213> Homo sapiens

<400> 217

```

gaattcggcc ttcattggcct atgaattaac agcttctcta tttgatattt gaaattcttc 60
tgtaagcctg tctgagtgtg tgtggaaacg attgtcaaat ctaaaatata tatatattaa 120
aaagtaggaa attgtcctag cttaccctaa atttcaaato tgagttgatt ttgtgatttt 180
attgcttata acagagaact cataattgac atattttttt cattgatgtg ttcttggtag 240
attttcacga atgagctggc aggtctaata ggggaggcct cgag 284

```

<210> 218

<211> 326

<212> DNA

<213> Homo sapiens

<400> 218

```

gaattcggcc ttcattggcct agaacctggg ccgcatgtat ctcttctatg gcaacaagac 60
ctcgggtgcag ttccagaatt tctcaccac tgtggttcac ccgggagacc tccagactca 120
gctggctgtg cagaccaagc gcgtggcggc gcaggtggac ggcggcgcgc aggtgcagca 180
ggtgctcaat atcgagtgcc tgcgggactt cctgacgcc ccgctgctgt ccgtgcgctt 240
ccggtacggt ggcgcccccc aggcctcac cctgaagctc ccagtgaacca tcaacaagtt 300
cttcagcccc accgagatgg aggcag 326

```

<210> 219

<211> 530

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (26)

<220>

<221> unsure

<222> (379)

<220>

<221> unsure
<222> (414)

<220>
<221> unsure
<222> (429)

<220>
<221> unsure
<222> (437)

<400> 219
gaattcggcc aaagangcct attgaagaag aagagagaac cttaccatgc tattagagca 60
tgctgattca agttctactt ctggtgaaag ttctagtgc acaagcagca acttctctca 120
ggtctagtac agtcagagat cagttccttc tgtataattt acagagaatt tttaaacttg 180
cggggaaaga tgtacgacct agattgtata gggagaaggg agcgtcttag ctgcatagtt 240
ctaattttga taagcaccat gccatgtttt tcattgtttg ccctttatat atgaaaatac 300
ttacacttaa aagcattgtt gtttagtttc aaaatctcaa cttaatacca ttcacaaatt 360
taataagggc gttgtcatna cataaaacta attgggaaat aatcccatct atcnggacag 420
ttctctgna tagtaanaca tgcgttctct aagcttctac cttttaaaca gctttgttct 480
aattactccc ttgtacctt tccatttctc agtaaaatta cataactcgag 530

<210> 220
<211> 507
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (360)

<400> 220
gaattcggcc aaagagccaa cactgagcaa atcagccgcc gacagtccca agtggatcgc 60
ctctatgttg cgctcaagga gctgggcgag gaacgcaggg tgagcctgga acagcagtag 120
tggtctctacc agtcagccg ccagggtgat gagctggaac actggatagc cgagaaggag 180
gtggtagctg gctccccaga gctgggccag gacttcgaac acgtgtcggg gctacaggag 240
aaattctcag agtttgccag tgagacagga accgcagggc gggagcggct ggcggcggtc 300
aaccagatgg tggacgagct gattgagtgt ggtcacacag cagcggccac catggctgan 360
tggaaggacg ggctgaacga ggcctgggct gagctgctgg aactcatggg caccggggcc 420
cagctgctcg ctgcctctcg ggagctgcat aagttcttca gcgatgccc ggagcttcaa 480
gggcagattg aggagaggcg actcgag 507

<210> 221
<211> 382
<212> DNA
<213> Mus musculus

<400> 221
gaattcggcc aaagaggcct atcgagccct ggccaaactcc gacggtgctg gaagtagtcc 60
tagttcaagc cccgtggacg tccggtggcg gtctcgggcc ccagccagcc caggggttag 120
gtaggggacg ctacgggggc tctgggccc accaggaaag gagccgtgga ggctgacgtg 180
ctcgctactc tcccaaccca agatccgagg cggcgtcagg cctcgtgcag ccgggtgggtc 240
tcagctgtgc aggtccaca gacctgttca tcctccacac ccgctgcacc aggctggcgt 300
ttaaggggag aaggtccaga gagggtagt gtgtggagag gatgcccaaa ctgcagggtt 360
ttgagttttg gggccgctcg ag 382

<210> 222
<211> 194
<212> DNA
<213> Mus musculus

<400> 222

gaattcggcc aaagaggcct aggtaaagtg ggcagaaaaa acagagagca ggaaatgttt 60
 tatttatcct tttttggtt gtttggtttg gttttgtgtt ttcaagacag ggtttctctg 120
 ggtaaccttg gctgtcctga aactcactct gtagaccagg ctggccttga actcacagat 180
 cccactgtct cgag 194

<210> 223

<211> 477

<212> DNA

<213> Mus musculus

<400> 223

gaattcggcc aaagaggcct agacacgggtg gcttccgaca tgatggttct cctgaaatcc 60
 ttctttgatt gccataaaga attccagacg gttccattct acattttctc agaatcctac 120
 ggaggaaaga tggctgctgg catcagtgtg gaactttaca aggctgttca gcaagggacc 180
 attaatgtca acttttctgg ggttgctttg ggtgactcct ggatctcccc cgtggattca 240
 gtgctgtcct ggggacctta cctgtatagt atgtctctcc ttgataatca aggcttggtc 300
 gaggtgtccg acattgcaga gcaagtcctc gatgctgtaa acaagggctt ctacaaggag 360
 gccactcagc tgtgggggaa agcagaaatg atcattgaaa agaacaccga cggggtaaac 420
 ttctataaca tcttaactaa aagcagcccc gagaaagcta tggaatcgag cctcgag 477

<210> 224

<211> 389

<212> DNA

<213> Mus musculus

<400> 224

gaattcggcc aaagaggcct acgggtgaagc aagagctgctg tgggccctga gtgggggagg 60
 gacggcagcc cttggagtgc caccagtgct ctctgccggc aggagaggag ggggagtatg 120
 tcctggcact gaagcaagag ctgcgcgggg ccatgaggca gctccccctac ttcattccggc 180
 cagccgtccc caagagagat gtggaacggt actcagacaa gtatcagatg tctgggccta 240
 ttgacaacgc catcgattgg aacctgtatt ggcggcgact cccagtgag ctcaagattc 300
 gagtgcggaa agtacagaag gagcggacca ccattatcct tccaagagg cccctaaga 360
 gcacagacga taaggaggag taactcgag 389

<210> 225

<211> 423

<212> DNA

<213> Mus musculus

<400> 225

gaattcggcc aaagaggcct attatagagt atgtggtttg ttgtcaaatg cttgaggctg 60
 ttgctgttag aattaacaga ggcactaaaa ttggaaggaa aaaaagcttt atttgaaaaa 120
 aatggagatg ggaataatac agtggagatc gtgaatacat ggactcagag ctgtgttgat 180
 gggagatcta ataattggaa ttctgaaatg tgtggtcact ttctcttctt gctcttggg 240
 atgatttaca ttttaaagcc aaggaggcaa aagagaaaaga aacagcaaag tgtggtgaag 300
 tggaactcaa aacatttata ttttaatttt catagtgtcc tgtattttgt ggtctctctc 360
 ttcaagccat ctgctgcctc tgaaggcatt tccaccagc cttcttgtcc ccaccaactc 420
 gag 423

<210> 226

<211> 379

<212> DNA

<213> Mus musculus

<400> 226

gaattcggcc aaagaggcct agagacgggtg gacaagcgcg agaaactggc ggaggggcgcg 60
 accgtggtca ttgagcattg tacgagctga cgcgtgtacg gccgccatgc tgctgccttg 120
 agccaggctc tgcaactgga ggccccagag ctacctgtgc aagtgaaccc gtccaaaccg 180
 cggaggggca gcttcgaggt gacgctgctg cgctcggaca acagccgtgt tgaactctgg 240

actggtatta agaagggccc tccacgaaag ctcaaatttc ctgagcctca agaggtgggt 300
 gaagaattga agaagtacct ttcataaaga gggtgggaaa gagtccctcat gttgagcttt 360
 cagtcctcgg aggctcgag 379

<210> 227
 <211> 113
 <212> DNA
 <213> Mus musculus

<400> 227
 gaattcggcc aaagaggccg tcggggaaaa aaagagcgag agcggcagct atcctgaggg 60
 aaacttcgga gggaaccatc tactagatgg ttcctccca agtttccctc gag 113

<210> 228
 <211> 379
 <212> DNA
 <213> Mus musculus

<400> 228
 gaattcggcc aaagaggcct atttgcacta agtctagaga gttctagtca atcatagtta 60
 gagtagatta gtttatacat taggtcaata ttcagttatc agtgaggat cttaggaagg 120
 ggagctctac agattgtacc tgttactagt gattttggca ggaagggtta actattcata 180
 taagctttta attatttaat gaagattaat tctctggtatt agtttgattc tcttccaaa 240
 tttattatta aagccagtta ggaagggtta gggattacta ttattgaatc tcatactgtt 300
 atattacaac atgttagcag atctgttttt aaattttgtt tgtttttttg cttttgtagg 360
 ttgccatgga gtccctcgag 379

<210> 229
 <211> 410
 <212> DNA
 <213> Mus musculus

<400> 229
 gaattcggcc aaagaggcct acaaaaggac ttttgataac agtttcaaga ttgtcagcat 60
 tttgcattgg acttgagctg aggtgctttt aaaatcctaa cgactagcat tggcagctga 120
 cccagggtcta cacagaagtg cattcagtga actaggaaga caggagcggc agacaggagt 180
 cccgaagcca gtttggtgaa gctaggaagg actgaggagc cagcagcagc agtgcattgt 240
 gaagatagcc caggaaagag tgcggttcgg tggaggaagc taggaagaag gagccatacg 300
 gatgtggtgg tgaagctggg aaagggttcc aggatggtgg agcgagagcg agttggtgat 360
 gaagctagct ggcggcttgg cttgtcaact gcgcggaaga ggtactcgag 410

<210> 230
 <211> 367
 <212> DNA
 <213> Mus musculus

<400> 230
 gaattcggcc aaagaggcct ataggcctct ttggccgaat tcggccaaag aggcctaacc 60
 tgcccttgcca ccctggccac agtgctgctg gctctggcca gaagaagccc ccaggcacag 120
 atgcagatca agcaacagaa ttctggggtg aggtgcccag gcacctttta agcaaagcct 180
 acaggctgtg gacatcccca tctacagaaa gtccactaca accaagagga caagctccct 240
 cctgggaggg ctaaggaaact gccagggtt caagggtgtc agtggttctg actctcagga 300
 tcttatctag ttcagtcacca gccctcagtg ggctagggtca gtgtggctgg cgctcagtg 360
 tctcgag 367

<210> 231
 <211> 393
 <212> DNA
 <213> Mus musculus

<400> 231
gaattcggcc aaagaggcct aggatgtggg ggtgcggtcg gcgcaggctt cctaccttgt 60
ggagtcgctc cgtgcgtccg tgcgtcccgt gggcatggca gagacatctt gaccgcggcg 120
tccgcttctg cgcgcgtggg tgacgtcgtt gggggcggcg gccgtgactg gcggacgctg 180
aacagagaaa cacgggttag actttccatt cacgcccaca gaaaaactta caacaaaatt 240
ataaattaaa ttaaatag aattaaatta caaataagga caagaataat tagggcagaa 300
accatagctg cggctaaaag agaaaccctg tctccaaaat caaaaattaa aattaaaaaa 360
taaacccaaa tgaaaaaag aataatactc gag 393

<210> 232
<211> 650
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (286)

<400> 232
gaattcggcc aaagaggcct actcagaaaa cacagagctt tagctccgcc aaaatgaaac 60
actcattaaa cgcacttctc attttctca tcataacatc tgcgtggggg gggagcaaa 120
gcccgttggg tcagctagag aaaggagggg aaactgctca gtctgcagat cccagtggtg 180
agcagttaaa taacaaaaac ctgagcatgc ctcttctccc tgcgacttc cacaaggaaa 240
acaccgtcac caacgactgg attccagagg gggggaggac gacgantatc tggacctgga 300
gaagatattc agtgaagacg acgactaaca tcgacatcgt cgacagtctg tcagtttccc 360
cgacagactc tgatgtgagt gctgggaaca tctccagct ttttcatggc aagagccgga 420
tccagcgtct taacatctc aacgccaaagt tcgctttcaa cctctaccga gtgctgaaa 480
accaggtcaa cactttcgat aacatcttca tagcaccgt tggcatttct actgcgatgg 540
gtatgatttc cttaggtctg aaggagaga cccatgaaca agtgcactcg attttgcatt 600
ttaaagactt tgtaaatgcc agcagcaagt atgaaatcac gaccctcgag 650

<210> 233
<211> 465
<212> DNA
<213> Mus musculus

<400> 233
gaattcggcc aaagaggcct aaagaaacaa gaggctggag attgtcaaat tcagtatccc 60
agttggctct tgattcttgg tgaaaccatc cctcagctcc tagagggaga ttgttagatc 120
atgaaactaa ttaccatcct ttctctctgc tccaggctgc tactaagttt aaccagga 180
tcacagtcgg aggaaattga ctgcaatgac aaggatttat ttaaagctgt ggatgctgct 240
ctgaagaaat ataacagtca aaaccaaagt aacaaccagt ttgtattgta ccgcataact 300
gaagccacta agacggttgg ctctgacacg ttttattcct tcaagtacga aatcaaggag 360
ggggattgtc ctgttcaaag tggcaaaacc tggcaggact gtgagtacaa ggatgctgca 420
aaagcagcca ctggagaatg cacggcaacc gtgggggttac tcgag 465

<210> 234
<211> 304
<212> DNA
<213> Mus musculus

<400> 234
gaattcggcc aagtaaaagc agggagaact ctttatctga gccatgttcc tatctcctgg 60
aacgcttcta tgcaccttc tctccccac actttttctg aggggtgacag ccagagaacc 120
agtctttgta gagaaaaacc cttttgtaca gcatatagta gaatctcaat acatggaatt 180
aagagaaaaga ctttaggaagg aaaccattcc caccaatgga agaaatcaac ttgttcacag 240
aggatccacc aaacgaagaa aattcatata cagtcagcta ccgacagaca caccagagct 300
cgag 304

<210> 235

<211> 570
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (32)

<220>
 <221> unsure
 <222> (168)

<400> 235
 gaattcggcc aaagaggcct acgagagagg angtgctgca agactctctg gtagaaaaat 60
 gaagagggtc ctggtactac tgcttgctgt ggcatattgga catgcttttag agagagccgg 120
 gattatgaaa agaataaagt ctgcaaggaa ttctcccatc tgggaaanga ggacttcaca 180
 tctctgtcac tagtcctgta cagtagaaaa ttccccagtg gcacgtttga acagggtcagc 240
 caacttggtga aggaagttgt ctcccttgacc gaagcctgct gtgcggaagg ggctgaccct 300
 gactgctatg acaccaggac ctccagcactg tctgccaagt cctgtgaaag taattctcca 360
 ttcccccgttc acccaggcac tgctgagtgc tgcaccaaag agggcctgga acgaaagctc 420
 tgcattggctg ctctgaaaca ccagccacag gaattcccta cctacgtgga acccacaat 480
 gatgaaatct gtgaggcggt caggaaagat ccaaaggaat atgctaataca atttatgtgg 540
 gaattattcca ctaattacgg acgactcgag 570

<210> 236
 <211> 702
 <212> DNA
 <213> Mus musculus

<400> 236
 gaattcggcc aaagaggcct agaagaacat ttctagggaa taatacaaga agatttagga 60
 atcattgaag ttataaatct ttggaatgag caaactcaga atggtgctac ttgaagactc 120
 tggatctgct gacttcagaa gacattttgt caacctgagt cctttcacca ttactgtggt 180
 cttacttctc agtgccctgtt ttgtcaccag ttctcttgga ggaacagaca aggagctgag 240
 gctagtggat ggtgaaaaca agtgtagcgg gagagtggaa gtgaaagtcc aggaggagtg 300
 ggggaacgggtg tgtaataatg gctggagcat ggaagcggtc tctgtgattt gtaaccagct 360
 gggatgtcca actgctatca aagcccctgg atgggctaata tccagtgcag gttctggacg 420
 catttggaatg gatcatgttt cttgtcgtgg gaatgagtca gctctttggg attgcaaaaca 480
 tgatggatgg ggaagcata gtaactgtac tcaccaacaa gatgctggag tgacctgctc 540
 agatggatcc aatttggaat tgaggctgac gcgtggaggg aatatgtgtt ctggaagaat 600
 agagatcaaa ttccaaggac ggtggggaca gtgtgtgatg ataacttcaa catagatcat 660
 gcatctgtca tttgtagaca acttgaatgt ggacggctcg ag 702

<210> 237
 <211> 317
 <212> DNA
 <213> Mus musculus

<400> 237
 gaattcggcc aaagaggcct aacggcaact ttacttaaga tttcctgtag tgtgtccgga 60
 gacatacttt atatatagca attatcatgt ttctaactgt gcaatggtat gatttatgta 120
 aagattcaaa atgattttgt ggaaaattaa ttagcaaaaga tggataagt tagatttgaa 180
 ttcttatgta tcagtaattt atgatcttat ttctctgtta ttgtgaatgt tggttttatt 240
 aaagagttat tgaaactgtc ataaaccatt ttataggtct ttaataaaat caaagatgaa 300
 atcagcaaag tctcgag 317

<210> 238
 <211> 341
 <212> DNA
 <213> Mus musculus

<400> 238

```

gaattcggcc aaagaggcct acaaagaaat acggattaaa accgccgaca ttataaacac 60
aggggaaaca gactgactct tttaaagaa gtttaccccc tcttcaactc aacctgaag 120
acactgtcat aaattgttga acggtggaac ttagtagtcc ctttgtgatg ttgtcattca 180
ttacatctgt ttcattgtta ggtgtagtgg gcgtggctgt tgaaggaagt ttgcagtctt 240
gcagctttta ttccctgtgc aacaaaagct tagaacctgt taaagggata ttaaaacaaa 300
gttgtagaat acaaacagta attggccatg cagatctcga g 341

```

<210> 239

<211> 409

<212> DNA

<213> Mus musculus

<400> 239

```

gaattcggcc aaagaggcct acgaggctccc gggcttaagt gatcctccca cctcagcctc 60
ctgggtagct gagatcacag gcgcgcgcca ccacaccaag ctaatttttt gatcgtctgt 120
agagacgtgt tctcacata tggcccaggc tgggtgtgaa ctctcggagc tcttagatgt 180
tgattcagac tccttcatag tataataggc ttaaaatgga aagactgtgc gtacaggaat 240
ttatcctaag gaagtaatgt gtcagatttg cgtatataaa tttaatatca gttattaaga 300
atTTTTTTT aaattaaata ttcaagtttt gggaatctgc taattctgtt gtgaaagtgg 360
aaatctatac agccacttaa aacagtatcg taggtgaaga gaactcgag 409

```

<210> 240

<211> 190

<212> DNA

<213> Mus musculus

<400> 240

```

gaattcggcc aaagaggcct acggcttgta ttttacaacg aaagcttata tatttgaagg 60
tgcccttgga atgtctaata gagacagcta tttttatgcc gcaattgttg ctgttggtgc 120
tgttcatgtg gttctggccc tgtttgtcta tgtggcctgg aatgaaggct cagcagctg 180
gcggctcgag 190

```

<210> 241

<211> 188

<212> DNA

<213> Mus musculus

<400> 241

```

gaattcggcc aaagaggcct agtgtatctg tgtctgtgtc tgtgtgtttg gggtagacag 60
accgacaggt ggacagttca gcagagtcca aaggccacac tgggaaagaa atgaatttac 120
tttttagtgc tctttctctc ttctctccctg ccttccccag tgcaagagaa gacgacaggc 180
cactcgag 188

```

<210> 242

<211> 110

<212> DNA

<213> Mus musculus

<400> 242

```

gaattcggcc aaagaggcct acacagaaca tgtttgggat gtggaagcct atgggtttct 60
tggctattgc agcagtagct ctgtatgtgt tacccaatat gcgactcgag 110

```

<210> 243

<211> 282

<212> DNA

<213> Mus musculus

<400> 243

```

gatcttctac tactagttag cttgatttta aaacttgttt gtgcagtatt gttctgatct 60

```

```
ctccctgaaa atataataac ggagaaatac ctagctggag tcttctggaa ggggaatggc 120
ctatgatctg tggctattat gtacatgggtg tctttggctg tggctctttt ctccctgggtg 180
gctgtaaatc cttccagctc ggccaggagt ggcaaagctc tgagcaccga tgctgctgcc 240
tgtcagggca gacttcctg tcctcaccac ccacatctcg ag 282
```

<210> 244

<211> 372

<212> DNA

<213> Mus musculus

<400> 244

```
gaattcggcc aaagaggcct acttccagcg tgtgttacct cacctgtctt taatagcctt 60
actgaattat aaggctatat tacaactac catattggta aaacattcag caagactcct 120
tgttaataat aattatatcc agtttctaata tattatccaa attctaatta cccctaacgt 180
tgaaacataa aaggtaagca ctagtaaagt cctggcttct tcctttcagt tgtgatagcc 240
caatcctttg aggtaatagt aatggttttc aaatcaaata cagccttgct ctgctgtgtt 300
tgctcagcat tatttccctc ccatactatc ttttcccccac caggccttgg agaatcaatc 360
acacacctcg ag 372
```

<210> 245

<211> 367

<212> DNA

<213> Mus musculus

<400> 245

```
gaattcggcc aaagaggcct agtttctcac tgtagaaatg aagcctgtgt gacgtgatgc 60
ctgtgctaac tagctgactt acctgtgtca ctatgcacat gccatagtga catgtcatga 120
catgtcatgt tacacgcttc caaacatgtt gcccatggta aaaacacaca gcttatctgt 180
taattgaaaa gaggagttaa aaaccagcaa ccaatttctt tcctttcatt ttctctctcc 240
tctccctttc atttcccttc cttttctttt ctttctgact attttgatta ttcccttgact 300
tttgtttcct acccattaaa tcgatctatt ttttcacaa cacagacaca cacagacaca 360
tctcgag 367
```

<210> 246

<211> 362

<212> DNA

<213> Mus musculus

<400> 246

```
gagtcctggc tgtccacatg gtcacatca tcttcatcat ccatatcacc catgtgggtca 60
tggctttcgt tggacttact tggagggtc tcttgtttaa agtcattggg ttcttcagag 120
gacacagcat tctgtggggc taggagattc tgcttctgag atgggtcagg gtttagccat 180
gtggccacag catctgggta tttgtgttaa agctgctttt cctcagaact tccagaatca 240
gctgttttaa ctggtatggc acaggtgatg cctaggaggc aaaagcaaat cactgcaatt 300
ctcatggtag tgagttttcc ttggacggct cgaggcaggc ctaggcctct ttggccgaat 360
tc 362
```

<210> 247

<211> 486

<212> DNA

<213> Mus musculus

<400> 247

```
gaattcggcc aaagaggcct atgcttgccg gcagactcgc cgccatgggc cgtgtgatcc 60
gagggcagag gaaaggcgcg ggttctgttt tccgtgcgca cgtgaagcac cgtaaggcgc 120
ccgcgcgcct acgtgctgtg gacttcgcgg agcgacacgg ctacattaaa ggcacgtaa 180
aggacatcat tcatgacctt ggccgcggcg ctccctcgc caaagtcgtc ttccgggac 240
cctaccgatt caagaagcgg acagagctgt tcatgcagc ggaggggatc cacactggac 300
agttcgtgta ctgcggcaag aaggcccagc tgaatatcgg caatgttttg cccgtgggca 360
ccatgcctga gggtagcgtc gtgtgtgtgc tggaggagaa acctggggac aggggcaagc 420
```


tggcccgagc ctccgggaac tacgccacag tcattctcca caaccagag accaagaaga 480
ctcgag 486

<210> 248
<211> 182
<212> DNA
<213> Mus musculus

<400> 248
ctcgagagga aaggggacac gagcttagca tccaaagggt ttctgtgggc cacacagagt 60
aagggtccaa aaccagtgc gtggtccctt tgttgccctg gggaggccag gttctctaac 120
tctcgaggca ggtctagaat tcaatcgcc aaagaggcct ataggcctct ttggccgaat 180
tc 182

<210> 249
<211> 101
<212> DNA
<213> Homo sapiens

<400> 249
gaattcggcc aaagaggcct accatgggat ctgtgactgt tttgtgtatt gttgtatctt 60
tactcctaga gtggtgcctg gcaagtagta gcaggctcga g 101

<210> 250
<211> 374
<212> DNA
<213> Homo sapiens

<400> 250
gaattcggcc aaagaggcct aatgatcttt cccattggcc caggctggag tgcagtgggtg 60
tgatcatagc tcaactgcagc ctcaagtgat agctcgtagc tcaactgggtc aagtgatcct 120
cctacctcat cgtgagttagc tgggactaca ggtgcccctc caccatactc acctaatgtt 180
ttgaatatct ttagagatg aggtcttgct atgttgccca ggctgggtctc aaactcctgg 240
gctcaagtga ttctcccgcc ttggcttccc aaattgctgg gattataggt atgagccacc 300
aagcccagcc ctgacctgat taataacacc caagacacac agagggtggga ccgtaacacg 360
gggagctact cgag 374

<210> 251
<211> 268
<212> DNA
<213> Homo sapiens

<400> 251
gcggccaaag aggcctacga gattctgtct ccaaaaaaaaa aaagcataag gaaaaggaac 60
aatcttagtt cctcataacc aatcttcata tgctatattg aatctttcca aataaatgat 120
atttaatact aatgttttct gcttattccc catgattctt ttggtgtctt acacttttaa 180
taataataaa atattccggc caggcgtgggt ggctcacgcc tgtaatccca acaatttggg 240
aggccgagat gaacggatcc atctcgag 268

<210> 252
<211> 373
<212> DNA
<213> Homo sapiens

<400> 252
gaattcggcc aaagaggcct acttctttgt aatactcaga gacaattctca gtggcccctc 60
cagctgcatg gctttaaatg ccaactgacat gctgatgggt cagtaggggg gcgctgtggt 120
gccctgccag atcccttcac acagccagtg cccaggaccc ccaccccca cactactacca 180
cgcattggtg ctgccagatg cctacagcct cttttccaga gacttgccct caactgaagt 240
cacttgccct caaatgtacc cactctcca gagaacttct cacagccaat aatgactga 300

taaaggcttt cacaggttcc ttctgagagc accccaaca ataaaccaag tgcattcaga 360
 tccctgtctc gag 373

<210> 253
 <211> 553
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (48)

<220>
 <221> unsure
 <222> (86)

<220>
 <221> unsure
 <222> (461)

<400> 253
 gaattcggcc aaagaggcct atgcccgtga agaggcgggc ataacacngc aagacgagaa 60
 gacctatgg agctttaatt tattantgca aacagtacct aacaaaccca caggtcctaa 120
 actaccaaac ctgcattaaa aatttcggtt ggggcgacct cggagcagaa cccaacctcc 180
 gagcagtaca tgctaagact tcaccagtca aagcgaacta ctatactcaa ttgatccaat 240
 aacttgacca acggaacaag ttaccctagg gataacacgc caatcctatt ctagagtcca 300
 tatcaacaat agggttttacg acctcgatgt tggatcagga catcccgatg gtgcagccgc 360
 tattaaaggt tcgtttgttc aacgattaaa gtccctacgtg atctgagttc agaccggagt 420
 aatccaggtc ggtttctatc tacttcaaat tcctccctgt ncgaaaggac aagagaaata 480
 aggcctactt cacaaagcgc cttccccctg aaatgatata atctcaactt agtattatac 540
 ccagcacctc gag 553

<210> 254
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 254
 gaattcggcc aaagaggcct aagaaagtga aaggtaagta gatagcaca aaggaaatgg 60
 tacaaataag cccaaaagtg taatgtatca gagtcaatgt ggataaaatt caccatttaa 120
 aaggcagaga tgggataata ataacataaa tcctgctgta tcctggttta taaaaggcac 180
 acctaacacc aaacaaaaag aaaattttga acataaagtt ttgaaaaact aagaggtttt 240
 tattaaacct cttttattaa atctatttta ttatttatag taagatgacg tgttagtcca 300
 ttctcatgct actaataaag acatacccaa gattgggtaa tttataaaga aaagaagttt 360
 aattgactca tagtttttga tagccgggaa agctcgag 398

<210> 255
 <211> 492
 <212> DNA
 <213> Homo sapiens

<400> 255
 gaattcggcc aaagaggcct actcctgtac ttctagaaat gatgcaaaca cttcaaggac 60
 ccacaaatgt ggaagaaagg aaaatccaaa cctcctaggg cccagcaacc caaacaaaac 120
 ctctatttac atttcataaa ttgaccttca atcaactttt atgcaaatat tttttcacat 180
 aattgtattc atatttaaac aaaatttttt ttttttttta gtagtgacag gggcttgcta 240
 tgttgcccat gctggctctg aacctctagc ctcaaacaat cttctcactt cagcatccca 300
 aaatgttggg attacagaca tgagccactg cacctagcct aaacagagta ttttttatta 360
 cacacctttt atgtgtccat gattacagta ggagttgtag gggatataaa ggcctatgcc 420
 actgaagtcc aaagaagaag gaggtcaaga aagagttttt gaagtagcat ttaagatgga 480

taaaccctcg ag

492

<210> 256

<211> 408

<212> DNA

<213> Homo sapiens

<400> 256

```
gaattcggcc aaagaggcct agcccttggt atttttttac ttcattagtt tatgctagtg 60
tctctgtctc ttactcaact ttctcttttt tcaatttctc ttctctctcc tttctctctc 120
tctctctctc acacacacac acaccctaca cacatgggca cacacacaca gtttcccagg 180
tttccctccc aaatccaaga agaaattggt cctctctctg tatctccagt ctgttccgaa 240
atcatgggct cactctcagg gatgataagc cttctctctg cttctctttt cccagacccc 300
aaagtcttcc ctgagcctgc tctggcgctc cccaccccaa gtccctgctc caaactcctc 360
actaccagcc tttatccctc gaagtttgaa aatccctggt acctcgag 408
```

<210> 257

<211> 493

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (71)

<400> 257

```
gaattcggcc aaagaggcct agtgatttgt ttgttttttg agatggagtc tcgcactgtc 60
atccaggctg nagtgcaatg gtgcaatctc tgctcactgc aaactccgcc tccctggctc 120
aagtgtattc cctgcctcag cctcccaggt agctgggatt acaggcacat gccactgcgc 180
caagctaatt ttgtattttt tagtagaaac ggggtttcac catgttgctt gggctggtct 240
tgaattcctg acctcagggt atacttgctt cgcctctcca aagtgtcttg gttacaggcg 300
tgagccagtg cgcctcagcg cctctgtgat tttttaaat gtgtcactca cactaaattt 360
aacagcaatt tttttgataa ctcatTTTTT ttgtagtctt tccagaacat taaacttagt 420
tttcatagaa attgcaatc tctttgtatt taattaactt acataattaa aataacaact 480
ggctacactc gag 493
```

<210> 258

<211> 525

<212> DNA

<213> Homo sapiens

<400> 258

```
gaattcggcc aaagaggcct agacagagca agactctgtc taaaaaaaaa aggacaatga 60
gatatactaa aatggtccaa tatgttaatt aaaacatact actaaaaaaaa gtgttaata 120
gcctgaaaga attgtgataa aggggaaact gagtactggg aacaaaagag aacaagtagg 180
taacgaagtg gtggccagggt gcagtggctc aggcctgtca tcccagcact gtgggagacc 240
gaggcgggctg gatcacttga ggtcaggagt cagaccagtc tggccaacat agtgaaaccc 300
cgtctctact aaaaatacaa agtttagccag ggggtgatggt gggagcctat aattcgagct 360
acgtgggagg ctgaggtagg agaatacatt gaaccgggac ggtgctgcca cccgaggag 420
tgacagctga actgagatct gactgaaggg ctgaagctcg gtggatgaag atgccagagg 480
agactgttct taggcagagg gagcagtgt acgaaggacc tcgag 525
```

<210> 259

<211> 344

<212> DNA

<213> Homo sapiens

<400> 259

```
gaattcggcc aaagaggcct agagcttagg gagcatagga gtctcctgga gaattagaag 60
aaacagattt tcctagctcc ggccccagac gttctgattt agtgtggtgt agaactcagg 120
```

```

agtttagtaat attaatggac agtcttgagt atttgctgat gcaactgggc tgaggaccat 180
acttttgaag acctgcttta gatagtagac aggacagtaa tttaaaatag gcaaatatgg 240
tttattttta aaatggtaaa actagaaaga tactgatttt atgtgtttta aaaaaaaagt 300
ctgcactcga ctgctatggt tatccaagaa ggcacccgct cgag 344

```

```

<210> 260
<211> 262
<212> DNA
<213> Homo sapiens

```

```

<400> 260
gctgtgccta ataacattgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt 60
gtgtgtgttt attgagaggg tgggggggca tcaactcaaca ttcagcctgt acatactcaa 120
agggttagaa gtgacaaaga tgactcaacc aacaggactt cccatgactg gccagccaga 180
ggaagagggc atgaggacac agccagcagc gttactgggt cgtgatgacg cagacctgcc 240
gggacacccc caaattctcg ag 262

```

```

<210> 261
<211> 421
<212> DNA
<213> Homo sapiens

```

```

<400> 261
gaattcggcc ttcattggcct acaaacagct gggaaatgtct ccaagccaga gtggactact 60
agtaggtatt cgttacttca ttgaattctg cagtgcctcc ttttgggggt tagttgcaga 120
ccgcttttaa aaaggcaaaa ttgtccctct cttttctctt ttgtgttggg ttttattcaa 180
cctgggcatt ggatttgtca aacctgctac cttgagatgt gtaccaaaga ttcgccaac 240
aactcaccac accaatgcaa gtcaccagtt aactatcctg ccaacaaatt cttcctttac 300
ctctttcttc accatatcac caaaaatgcg tgagaaaaga aaccttttgg aaacagggt 360
caatgtctca gacaccgtta ctttgccaac agctccaaac atgaacagtg aaacactcga 420
g 421

```

```

<210> 262
<211> 329
<212> DNA
<213> Homo sapiens

```

```

<400> 262
ggtcaaacaa tatgaaactt gaagaagtag ttgtgacttt gcagcttggg ggtgacaaag 60
agccaacaga gacaatagga gacttgtcaa tttgtcttga tgggctacag tttagtctg 120
aagttgttac caatggtgaa actacatgtt cagaaagtgc ttctcagaat gatgatggct 180
ccagatccaa ggatgaaaca agagttagca caaatggatc agatgacct gaagatgcag 240
gagctggtga aaataggaga gtcagtggga ataattctcc atcactctca aatggtgggt 300
ttaaaccttc tagaccccca aaactcgag 329

```

```

<210> 263
<211> 499
<212> DNA
<213> Homo sapiens

```

```

<400> 263
gaattcggcc ttcattggcct aggtagcggg tacagaataa acacagaaat ctggatatga 60
gaaataactg tggaatttat aattccaacc aaatgaaatc cagcaccttg ataactatga 120
tctgactaca atattattaa acaaagctcg aagaggaaaa taggaatact aaaaatatca 180
cattaagacc aagatgagtc cattatcacc aatgtcttac agttccattc ttcaggattt 240
ccactccatt ttaaatgcta gggctgattt tcttcattct aacctgaat gcttatgata 300
acaccaaata cttgattttac cttatatgaa gatggcggct ctgctctgag aggagtttca 360
ggtaacttgc caggtaaaac atcttcatct acagtgggtt ccacattcct gataagatac 420
tggttagtgg tttgcagtga actaacactt tcttttttgg agaggttagg aagggtaaat 480
aaaatgtcac tgtctcgag 499

```

<210> 264
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 264
 gaattcggcc ttcattggcct agtttttgtg agagtgtgta ggagtggagag tttatatttg 60
 gagaatatga gatgtaagat atgtatacca gaagaattgg ggttatatat ttgtgatttg 120
 ggttgtgaag atgtattttc catgtgtttt ctcagatgaa tgttggcgat ttgtatttgc 180
 ctaatgtttg gcagatttgg aagaattatc ttgtgcacat gggcaataac agagaaaagt 240
 cttgtgtcta ttttgtggat gtacgctctg tttggtttac gtatttggga aatgtaggaa 300
 gaccatgcgt actcgag 317

<210> 265
 <211> 301
 <212> DNA
 <213> Homo sapiens

<400> 265
 gaattcggcc ttcattggcct agtatcacag gctttcttca aataaccagt tcctctaaga 60
 cattgaaaat ataattcggg gtttaaaata aattcatacc cgttttgtgt gctgtgcata 120
 aatagcaagt atatgtgtac cttaccaaac ttatgggtccc cagtccccaat attccaaaat 180
 tatgcaggag ggaagggttag ccattgcagt aaacaatttc tccctattga cccatgctct 240
 ccagctgatt atgatgtggg cagtactcat ccaaggctat acagaccagc cgggtctcga 300
 g 301

<210> 266
 <211> 517
 <212> DNA
 <213> Homo sapiens

<400> 266
 gaattcggcc ttcattggcct aggtaaagaa aaagcctgcc agggattcag aaggcatccc 60
 actagcgatc agctgacatt cctaactgaa ggctgcaatg tgttgcttat tcattttgta 120
 ccgtgggagc tgcggggact agcagagagc taaactatgc atttcaaaca gcagtgtttg 180
 tgcagaaaaga ggggtgagag agaggcagcc ggcgaggaaa gacacagct ggactttctc 240
 cttgttttta tccattttctg caggatcatg tattcataag ggatgaggcg ggccacggcg 300
 atcccaggcc tgagccgcg cctaccagct cagttcagag ccaggccctc cactaccgga 360
 acagagagcg ctttgccacg atcaaatcag catctttggt tacacgacag atccatgagc 420
 atgagcagga gaacgagttg cgggaacaga tgtcagggtta taagtggatg cgacaatgga 480
 ttttacataa tggattgaat tctagacctg cctcgag 517

<210> 267
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 267
 gaattcggcc ttcattggcct aatcccagct actcaggagg ctgaggcagg agaatcactt 60
 gaacccggga ggcggaagtt gcagtgaagt gagattgcgc ccctgcactc cagtccgggc 120
 aacagagcga gactccatct caaaaatata tatatatatt cagcaccac cacttctccc 180
 catctccact gcctgcacca gcccaggcc tgccctcac ttgggtgctg tcgtagctcc 240
 tgtctgggct gcttgcatc acctttgcca ccacagctctt ttctctccat agcagccggt 300
 ctgattcttc tcaaaccctaa gtcgcatcaa gtcactcagc tgctcttcag cctgcagtgt 360
 ctctgaact caccctggcc ctcaaggcca acccatcttc ctgcgcagcc tcgcctcttg 420
 gtgtctccct cacttgctcg gctcctatcg tgccggccct catgccgctc ctgaacacac 480
 acagtctcga g 491

<210> 268
 <211> 528

<212> DNA

<213> Homo sapiens

<400> 268

```

gaattcggct tcattggccta caatctagag aaagcaaaaa ctatggaatt gaatgtagga 60
aatgaagcta gctttcatgg acaagagaga accaaaactg gtatttctga agaagcagca 120
atagaagaaa ataaaagaaa tgatgactct gaagcagaca cagctaaact gaatgccaaa 180
gaagtagcaa ctgaggaatt taattcagat attagtcttt ctgataatac tacacctgta 240
aaattgaatg ctcaaaactga gatttctgaa caaacagcag ctgggggaact agatggagga 300
aatgatgtat ctgatctaca ctcatctgaa gaaacgaata ccaaaatgaa aaattatgaa 360
gaaatgatga tcggcgaggc aatggctgaa actggccatg atggtgaaac agagaatgag 420
ggcataacta ccaaaacctc aaagcctgat gaagctgaaa caaacatggt gactgcagaa 480
atggacaact ttgtttgtga cacagttgaa atgagcaca gactcgag 528

```

<210> 269

<211> 454

<212> DNA

<213> Homo sapiens

<400> 269

```

gaattcagct tcattggccta gggacggttg tctcaaaaaa caaaaacaaa aataagttag 60
aaaaaaaacc agaagaaaact tgtccttagc gttcctaaga cttaggagag ctaagccggg 120
gagggcagga gtagatggac aagaccatac caaggtcagc tgttccccct gccgagaagg 180
cagcagctga actttccgct tacgctgccc agagctgcca ggtgtagact gagaattcga 240
gttttgtttt ttccttgggg ttgtatctgc agccttttct ccctgggact cctgtctgct 300
gccaatggag ttgaagaact ggaatgatga cacagctctt ctctctctat tttctttgct 360
ggcctctccg gtgtctggga gcgggatgag gctgggctag agaaggggtga tgaactgggg 420
ccatttctct tccacagctg tgagatgcct cgag 454

```

<210> 270

<211> 340

<212> DNA

<213> Homo sapiens

<400> 270

```

gaattcggcc ttcattgccta gtgtgctgta tgacaaagac gctgtctatg ttgaccttgg 60
tggcagccac gtttttcagg atgaagtggg gccacccat gagctgtgcc agagtctcat 120
ctctaccac tccaccattg atgccaagat ggcttcaagt cgagtgcgc tgttttctga 180
ttccaagcca cttgggtcag aggatataga taatcaaggg ctaatgatgc caaaggagga 240
aaaacaaatg gacttgaaca ctggctgaat gcgtcggaat gccattttcg gagatgaaga 300
tgaatctgga gatagtgatg atgaagaaga tgatctcgag 340

```

<210> 271

<211> 496

<212> DNA

<213> Homo sapiens

<400> 271

```

gaattcggcc aaagaggcct atgaagtcac tgagacaata gctgatctca ttgggccaat 60
gagctcttcta aaaattgcag tccttctccc ttggcattcc acagtcaagt aaacttacac 120
gtattgtctg gaagaatgaa tccatttctt cctccatctt ctttggtctt ggtgtgggct 180
tatgtaatct ggatacaatc ccataaagtt gctgtgttta gtaatgtcat ttctccgtgt 240
ctgttgggga ctggtttcac gatccccata ggatagcaaa atctctggat gctcatggcc 300
tttatataaa agggcacgat atttgcatac aatctacaca tccccccaca tactttcaat 360
catctctact cataatactg aatacaatgt aaatcctatg taaatcgtta ttatgctgta 420
ctgggttttt cgtctgtgat attttcagta ttgcattgtt ttgttgtgaa aacagggtct 480
tgctcagtc ctcgag 496

```

<210> 272

<211> 403

<212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (25)

<220>
 <221> unsure
 <222> (29)

<220>
 <221> unsure
 <222> (43)

<400> 272
 gaattcggcc ttcattggcct aagantgtnt gtgggtgtgg ganccagccg tatcagaaat 60
 ctttttaggg aagcaaaggg gaatgctcct tgtgttatat ttattgatga attagattct 120
 gttggtggga agagaattga atctccaatg catccatatt caaggcagac cataaatcaa 180
 cttcttctgctg aaatggatgg ttttaaaccc aatgaaggag ttatcataat aggagccaca 240
 aacttcccag aggcattaga taatgcctta atacgtcctg gtcgttttga catgcaagtt 300
 acagttccaa ggccagatgt aaaaggctga acagaaatgt tgaaatggtg tctcaataaa 360
 ataaagtgtt atcaatccgt tgatccagaa attatagctc gag 403

<210> 273
 <211> 455
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (133)

<400> 273
 gaattcggcc ttcattggcct agtaggtaca tccaaaatgt cttcatagtc tgcactcatt 60
 ccctttgccc agcgaccaac tgtgaccatt cgctctgaat tctgactttc agggcaatct 120
 ttcttttaaat gtnccacaga gccacaaagt ttgcaaccgc caccatcagc atagagtcct 180
 ttgggattat caggacaaga tctagacagg tgccccatct ctccacaaac aaaacatttt 240
 gcaaaaaggaa attcgccaag agccgggtct actttagcct tacacttggg tatttcgtgc 300
 tctgtggacc cacacctgta acatatccca gtgcccattg cttgattttc aagggcagcg 360
 gggcaatctg caattccatg accaggtttt ctacaatgga aacacaccgc gcacgaatcc 420
 cccaggcact cgaggcaggt ctagaattca atcgg 455

<210> 274
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 274
 gaattcggcc ttcattggcct agggaaaaat gattgtagaa ctagtgggca tctaattgctc 60
 taataaaatgt tttttgtttg ttttttttta aagacagggt ctcacctctc ccccagtcg 120
 ggagtgcagt ggcacaatca cggctcactg caccctcgaa ctctgggct caagcaatac 180
 tcttgcttca ccttccggag tagctggaac tacagatgtg caccaccata aaaaacatat 240
 ttaaaaatct tgaaatattt gtagtgctaa cgcttttttt atccactgag tatagaatca 300
 cagcataatc ttcataact tttaccttca caagttcttt aaatacagca tgctgaatca 360
 ttttttcttt gacctgcctc gag 383

<210> 275
 <211> 302
 <212> DNA

<213> Homo sapiens

<400> 275

```
gggaagatct aaagaccag gaaggtctct gggataaagc caagatgaaa ccccccttac 60
ttctggctct tctatttggg gcagtttctg ctcttcatct aaggtctgag acttccacct 120
ttgagacccc ttgggtgct aagacgtgc ctgaggatga ggagacacca gagcaggaga 180
tggaggagac cccttgcagg gagctggagg aagaggagga gtggggctct ggaagtgaag 240
atgcctccaa gaaagatggg gctgtttagt ctatctcagt gccagatatg gtgatactcg 300
ag 302
```

<210> 276

<211> 468

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (319)

<400> 276

```
gaattcggcc ttcattggcct aaaactagaa acagttatat ccttttagaga aattactatt 60
ttcaagattt ttgctagctg cttcttggca agttttgtta acttttgttg acttttaact 120
ttatgtcact catctcttaa aactgtagat cacttttgtc ttgctaggta caatgttggt 180
gtcacacagt cttcattaca tgcattgtggg tggcacattt ctgatgtcag gctagcttcc 240
ttcctaacac ttcttgcac cattctagca gcatgatctt agggcatgta agccattttt 300
aatgttagtc ttaaacaatnt gacacacaca cacacacaca cacacacaca 360
cacatacag gacatttttg gattatagtg atattgttaa attgaatata taactggaat 420
caagtgcacat ttgaatgaga cagattcaca gaagtcatag agctcgag 468
```

<210> 277

<211> 443

<212> DNA

<213> Homo sapiens

<400> 277

```
gaattcggcc ttcattggcct actaagcacc atagaatata ttttgtttca caaatttggg 60
attcattcag aataagtatt tgaagagtga gtaaatctta tgcaattata gttattaaat 120
gacttataaa ctgtgtttct ctccacttc ttgctacatt taatcttcta ggtgttcaga 180
tatctttgga gattatagga agcaataaag ctaaggcagc taacctttca acattcttgt 240
gtcaggctaa tattttgggtg aaaggaattc ttgtgtttct caaagaacta gagctgaagc 300
agaaataagt tccaatgagc aagtgtccaa ttggaccatt gaatgaaatc tagtgtttta 360
aacaattctg atgtttcaat gttttgttct gttttctttt gatcttgtga gcagtaagac 420
atattttatg tgggtggctc gag 443
```

<210> 278

<211> 354

<212> DNA

<213> Homo sapiens

<400> 278

```
gaattcggcc ttcattggcct aggtggagtc cgtcatgccg gtgggtggtg gcacattgag 60
ccccgggata gacagttccc ccagctgacc agatcccagg tgttccagag cgagttcttc 120
agcggactca tgtggttctg gattctctgg cgcttttggc atgactcaga agaggtgctg 180
ggtcacttcc cgtatcctga tcttcccg tggacagatg aagaattagg tatccctcct 240
gatgatgaag actgaaggtg tagactcagc ctcaactctgt acaagagcca ggtgagaatt 300
tcaaggatta tcgacttcat attgcacatt aaagttacaa attaaagact cgag 354
```

<210> 279

<211> 414

<212> DNA

<213> Homo sapiens

<400> 279

```

gaattcggcc ttcatggcct acacaaacca gcttgctgac aaaggggaagc tttctcctca 60
tgctttcaaa accgaatctg gggaggaaac tgacctcatt tctccccgc aggaggaagt 120
taagtcttca gagcctactg aggatgtgga gccc aaagag gctgaagatg atgatacagg 180
acccgaggag gctcaccgcc caaagaagag aaagaaaaga tgtccggttc tgctccagt 240
gagaaccgtg aaggaacact ttcggattcc acgggtagcg agaaggatga cttttatccg 300
aacggttctg gaaatggcag cgcggagagc agccacttct ttgcatatct ggtgactgca 360
gccattcttg tggctgtcct ctatatcgtc catcacaaca agcggacact cgag 414

```

<210> 280

<211> 352

<212> DNA

<213> Homo sapiens

<400> 280

```

gaattcggcc ttcatggcct acagacatgc aggggtgacgg tgaagagcag aataaagaag 60
cgctgcagga cgtggaagac gaaaatcagt gagacataag ccaacaagag aaaccatctc 120
tgaccacccc ctctcccca tcccaccctt tggaaactcc ccattgtcac tgagaaccac 180
caaactctgac ttttacattt ggtctcagaa tttaggttcc tgccctgttg gttttttttt 240
tttttttttt aaacagtttt caaaagtctt taaaggcaag agtgaatttc tgtggatttt 300
actggtecca gcttttaggt tctttaagac actaacagga ctaactctcg ag 352

```

<210> 281

<211> 350

<212> DNA

<213> Homo sapiens

<400> 281

```

gaattcggcc ttcatggcct aactgagtgc cctcaaagag aagaagaaga aaaggacagt 60
ggaggaagaa gaccaaatat tccttgatgg ccaggaaaat aaaagaaggc gccatgatag 120
cagtggcagt ggacattcag catttgagcc cctggtggcc agtggagtc ccgcttcttt 180
tgtgccttaag cctgggtctc tgaagagagg cctcaattct cagagctcag atgaccactt 240
gaataagaga tcccgaagct cttccatgag ctcccttgaca ggcgcttaca caagtggcat 300
ccctagctcc agccgcaatg ccattaccag ttcctacagc tccactcgag 350

```

<210> 282

<211> 285

<212> DNA

<213> Homo sapiens

<400> 282

```

gcttttctaa gaaatatggg gtttagaag gggttcctgc agctgctggt cgtagcgggtg 60
ctggcatccg aacaccgggt ggctgggtgca gccgaggtct tcgggaattc cagcgagggt 120
cttattgaat tttctgtggg gaaatttaga tacttcgagc tcaataggcc ctttcagag 180
gaagctatct tgcatgatat ttcaagcaat gtgacttttc ttattttcca aatacactca 240
cagtatcaga atacaactgt ttccttttct ccgactcccc tcgag 285

```

<210> 283

<211> 334

<212> DNA

<213> Homo sapiens

<400> 283

```

gtgcgaccaa aatccagtgg agagtccaat gtgtcagtca aatagcagag atcacctcag 60
tgacaaaagaa agtaaggaga gcagtgttga gggggcagag aatcaaaggg gtcctttgga 120
aagcaaagggt cataaaaaat tactgcagtt acttacctgt tcttctgatg accgggggtca 180
ttcctccttg accaactccc ccctagattc aagttgtaaa gaatcttctg ttagtgtcac 240
cagccccctct ggagtctcct cctctacatc tggaggagta tctctacat ccaatatgca 300

```

tgggtcactg ttacaagaga agcacggact cgag

334

<210> 284

<211> 445

<212> DNA

<213> Homo sapiens

<400> 284

gaatttctag acctgcctca tgctctctcc aacaggcttg cagccaattt actggagcag 60
 ggatgacgta gcccagtggtc tcaagtgggc tgaaaatgag ttttctttaa ggccaattga 120
 cagcaacacg tttgaaatga atggcaaacg tctcctgctg ctgaccaaag aggactttcg 180
 ctatcgatct cctcattcag gtgatgtgct ctatgaactc cttcagcata ttctgaagca 240
 gaggaacact cggattcttt tttcaccatt cttccaccct ggaaactcta tacacacaca 300
 gccggaggtc atactgcacg agaaccatga agaagataac tgtgtccaga ggacccccag 360
 gccatccggt gataatgtgc accataaccc tcccaccatt gaactgttgc accgctccag 420
 gtcacctatc acgacaaatc tcgag 445

<210> 285

<211> 289

<212> DNA

<213> Homo sapiens

<400> 285

gaattcggcc ttcattggcct aatgagatcc tggattacaa ggatttagca gccattccga 60
 aggtcaaggc aatttatgac attgaacgac cagatcttat tacctatgag cttttctaca 120
 cttcgggcta tgatgacaaa caggagagac agagccttgg agagtctccg aggactttgt 180
 ctctactccc atcagcagaa gggtagcagg atgttcggga tcggatgatc catcggtcca 240
 cgagccaggc ctccatcaac tcccctgtgt acagccgcca caactcgag 289

<210> 286

<211> 422

<212> DNA

<213> Homo sapiens

<400> 286

gcatgtgaat tctagacctg cccgagatga atgaccctta tgcctctctc cctgaggatg 60
 atgatgacca tcagaaagac ggcaagacct acagggtgccc gatgtgctca ctgacattct 120
 acctcaagtc ggagatgcag atccactcca agtcacacac cgagaccaag cccacacaagt 180
 gccacatttg ctccaagacc ttccgccaaca gctcctacct ggcccagcac atccgtatac 240
 acctcagggc taagccctac agttgtaact tctgtgagaa atccttccgc cagctctccc 300
 accttcagca gcacacccga atccacactg gtgatagacc atacaaatgt gcacacccag 360
 gctgtgagaa agccttcaca caactctcca atctgcaggt aaatgttcca cccacactcg 420
 ag 422

<210> 287

<211> 400

<212> DNA

<213> Homo sapiens

<400> 287

gaattcggcc aaagaggcct aggattctca cccactgtgc ttccagccgg ctcaccttga 60
 attcgtccat gatatttcga atggccttgc cgcgggcacc aatgatgcgg gcgtgaacgc 120
 ggtggtccag cgggacgtcc tcagaaacca tctgctcaag ttcaccaca attctcagta 180
 tagcatccct ggcagcttct gtgttctttt cgtaccctgt gatggtaatt tggctcctggg 240
 gctaaaaaag gagaatgtag tcagaaaagg ggatgcctta ctgggattcc cgtcaggggc 300
 aagagccggc cccactgct gaggaaca gctcaggaga gaagatggaa agcaacgtca 360
 cggctgattt aaaacaagag gttaacaacg tccactcgag 400

<210> 288

<211> 194

<212> DNA

<213> Homo sapiens

<400> 288

```
gaattcggcc aaagaggcct agcctttatt tgaactacta cattgctacc agattacatc 60
acttttcaga gttagagtaa cataatacct tggaaactat agccgaaaca gttcacatag 120
gaatgcactt tcatccact tttgcacttt tcctttggca cagtgaagct tatcttacag 180
tcccatttct cgag 194
```

<210> 289

<211> 413

<212> DNA

<213> Homo sapiens

<400> 289

```
gaattcggcc aaagaggcct agggggacgt gaggttaagaa ggtgcccggg ccagggggca 60
ggagctctga ttaggacag ctccagccag tcaaggggtg ctatgaggac agcagggggc 120
tccgagtctg ggggtggcctc acccccacaa gcagtcctgg ctactcagca gcactaccca 180
gaggggacgc ctgggcagtt tcttcaattc ggtggcacat caacatcgtt tgaaacttgt 240
tttttcttgt tttgttttct agaatttgat tcttccagaa tgaccttctt atttatgtaa 300
ctggctttca tttagattgt aagttatgga catgatttga gatgtagaag ccatttttta 360
ttaaataaaa tgcttatttt aggtcccgtc cccattgtgg ctctgggtctc gag 413
```

<210> 290

<211> 213

<212> DNA

<213> Homo sapiens

<400> 290

```
gaattcggcc aaagaggcct acttaatatg actagcttac acaatagctt ttatagtaaa 60
gatacctctt tacggactcc acttatgact ccctaaagcc catgtcgaag ccccatcgc 120
tgggtcaata gcacttgccg cagtactctt aaactaggcg gctatggtat aatacgcttc 180
acactcattc tcaatcacct gagtccactc gag 213
```

<210> 291

<211> 136

<212> DNA

<213> Homo sapiens

<400> 291

```
gaattcggcc ttcattggcct acgcctacac aattctccga tccgtcccta acaaactagg 60
aggcgtcctt gccctattac tatccatcct catcctagca ataatccca tctccatat 120
atccaaacaa ctcgag 136
```

<210> 292

<211> 300

<212> DNA

<213> Homo sapiens

<400> 292

```
gcgattgaat tctagactgc cagagccttc cctgtgggtg tgtaaatcat ttgtattcag 60
ttactgtgcc cggaaaaacc ttccctcgcg gtgcagggtg cacacagatt cattcctcac 120
ttgcttgggg cagtcattgt tctgtctctc tgtctctgtc tctctgtctg tctgtctgtc 180
tgtctctctc tctctctctc ttatctgcac gaagagctcc agatactcgt ctcctggaat 240
ggtggagatg aactaggcat ggaggtgcgt gaccaacctc agacggctcc cccactcgag 300
```

<210> 293

<211> 434

<212> DNA

<213> Homo sapiens

<400> 293

```
gaattcggcc aaagaggcct atttagctga ttattattaa atatttcagt tttgtttata 60
atagaaactg cctcatgttt ccagatatta ttatgctaac atttattttc tgcttaaata 120
gacttgctat ggagagactc tatgcagttt ttacagatta cgagcatgac aaagtttcca 180
gagatgaagc tgtaacaaa ataagattag atacggagga acaactaaaa gaaaaatttc 240
cagaagccga tccatatgaa ataatagaat ccttcaatgt tgttgcaaag gaagttttta 300
gaagtattgt tttgaatgaa tacaaaaggt gcgatggtcg qgatttgact tcacttagga 360
atgtaagttg tgaggtagat atgtttaaaa cccttcatgg atcagcatta tttcaaagag 420
gacaaacgct cgag                                     434
```

<210> 294

<211> 386

<212> DNA

<213> Homo sapiens

<400> 294

```
gaattcggcc aaagaggcct aaccactttt ggctcccaa agtgcctggga ttacaggtgt 60
gagccactgt gccagccctt aaccattcac ttttgagggg cattttgggtt atttctaggt 120
tttggtctatt gttcaactgc tatgaacaat catgtacaga tttttgaagc tgaaaaagca 180
ttgaagatgc ttccaaagat aaatattact gataagtttt tctccccagt aataagcagc 240
tggattttta atgttagtct aaagcgtgag gtctaattgt gcagatttct ttactctctt 300
aggtgttatg cctcaaacat aactcccata ttgggcgtgg caatccagtt aatctggtgt 360
cagtagtgtt aaagaaccat ctcgag                                     386
```

<210> 295

<211> 433

<212> DNA

<213> Homo sapiens

<400> 295

```
gtcgacgggt aaggcagggg cagggggagg tttcttggat ttcttttctt ctttggagac 60
cttcttcaca gggcgtgtgg atttgtgtgt ggacgctggg tcatgctctc cagggtcacc 120
tgaactgggg gtgagctcct ggagccgccc gatgcactgc ttcagctcgt ttttgaggtc 180
tatggtgctc tgggtgatgc cttttatcag cttgtggttc agttccacct cggggatgta 240
gactggcttt gttgaaattc ctgcagttt tgatgcttcc tccagaaact cgaactcacc 300
cctcttggtc aggcctctgt caatctcttc cctcaaggtc tggatctcac tcttcttctt 360
gaggagaatc tgataaatgg tgtcaaatct gctgttgacc ctcttcgtca cggcctcttt 420
ggccctcgag aca                                     433
```

<210> 296

<211> 363

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (197)

<220>

<221> unsure

<222> (343)..(344)

<400> 296

```
gtcgacgagc gccaggcttt atcttatcaa aatgctgact cttatcacca tcacaccagc 60
ccccagcatc tgctacaaat cagggcacaa gaatgtgtct cacaggcttc ctcacccacc 120
ccgccccacg ggtatgtcta ccagccggca ctgatgcatt cagagagcat ggaggaggac 180
tgctcgtgtg aggggggncaa ggatggcttc caagacagta agagttcaag tacattgacc 240
aaaggttgcc atgacagccc tctgctcttg agtaccggtg gacctgggga ccctgaatct 300
```

ttgctaggaa ctgtgagtca tgccccaaga attgggtcaa cgnnctcttt ggccctcgag 360
aca 363

<210> 297
<211> 545
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (13)

<220>
<221> unsure
<222> (19)

<220>
<221> unsure
<222> (32)..(33)

<220>
<221> unsure
<222> (39)..(40)

<220>
<221> unsure
<222> (59)

<220>
<221> unsure
<222> (68)

<220>
<221> unsure
<222> (72)

<220>
<221> unsure
<222> (78)

<220>
<221> unsure
<222> (81)

<220>
<221> unsure
<222> (211)

<220>
<221> unsure
<222> (228)

<220>
<221> unsure
<222> (343)

<400> 297
ctgcccaaaa ttncagcna ataccgaagc anncaaccn naccacaactc ggaattcgnc 60
caaagagncc gnccacacac nccgacccaa ggaaaaaactc cactaccatg agaattgcag 120
tgatttgctt ttgcctccta ggcacacac gtgccatacc agttaaacag gctgattctg 180

```

gaagttctga ggaaaagcag ctttacaaca natacccaga tgctgtgncc acatggctaa 240
accctgaccc atctcagaag cagaatctcc tagccccaca gaatgctgtg tcctctgaag 300
aaaccaatga ctttaaaca gagacccttc caagtaagtc cancgaaagc catgaccaca 360
tggatgatat ggatgatgaa gatgatgacg accatgtgga cagccaggac tccattgact 420
cgagcgacct tgatgatgta gatgacactg atgattctca ccagtctgat gagtctcacc 480
attctgatga atctgatgaa ctggctcactg attttccgct gacggcctct ttggccctcg 540
agaca 545

```

<210> 298

<211> 419

<212> DNA

<213> Mus musculus

<400> 298

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gaattcggcc aaagaggcct ataaattttg accactgttt ccttaagaaa tccattcattc 60
tgcagctaaa aatataaata ttttatgagg tagcataagt gtgggtgca aacataagat 120
aatagctagt attcataata attccatttg aattagagaa aaaaattcag aattgatact 180
atttgtaaat ttgttgccct tatggaagat gattttctaag ttctgttagaa tttcttagcc 240
aagcctgtct ctgacgtaaa tctgacctat tgtgtggttg gacttagaat attttccctt 300
atgggaaagt acgcttgaa ctaacatttg ggccagtgtt tctcctttgc ctgtgtagt 360
tcatagttgg aggaaaacat ctaactagaa tgctgtacct cagcccccca gaactcgag 419

```

<210> 299

<211> 511

<212> DNA

<213> Mus musculus

<400> 299

```

gaattcggcc aaagaggcct agtggcgcg tccggcaaag tgatttggag aggtacaact 60
gatgagaaaa aaagagcaag agaggaaagg agagacttct gctgccaaca tgcagagaag 120
tattatgtca ttttttcaac ccacaaaaga aggtaaagcg aagaagccag agaaggagac 180
accagcagc atcagagaga aggaaccccc tccaaagggtg gcgctgaagg agaggaatca 240
agtgggtgccc gagagtgatt ctccagtga gaggacagga aggaaggtag cccaggttct 300
gagctgtgaa ggggaggacg aagatgaagc ccctggcacc cccaaagtcc agaagcctgt 360
gtcagactct gaacagagct ctctctccag ccctgacaca tgctctgaga acagtctgt 420
cttcaactgc agctccccc tggacatctc cccatcagga ttcccaaagc gtcgaactgc 480
gcggaagcag ctccccaac ggacactcga g 511

```

<210> 300

<211> 663

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (272)

<220>

<221> unsure

<222> (330)

<400> 300

```

gaattcggcc aaagaagcct aggagcttgg aaactttgca actttgggac caagcacaat 60
gaagtattcc ctctgggctc tgctgcttgc cgtgctgggc acacagctgc tgggaagcct 120
gtgttccacc gttcgggtccc agagttccga ggaaggatac agcaggaaag aaaaaacatc 180
agacccaata ttatccttgt gctcactgac gaccaggatg tggagctggg ttccctgcaa 240
gtcttgaaca agacgagaaa aatcatggaa cnggggtggg ccacctcac caatgccttt 300
gtgaccacgc ccatgtgctg tccatcacgn tcatccatgc tcaactggga gtacgtgcat 360
aaccacaatg tctacaccaa caatgagaac tgctcgtctc ctctcgtggc ggcaatgcac 420
gagcctcgga cctttgtgtg gtatctcaac aacaccggct acagaacagc cttttttgga 480

```

```

aaatacctca atgaatacaa tggcagctac atccctcctg gatggcgaga atggctcgga 540
ttaatcaaga attctcgttt ctataattac actgtttgtc gcaacggcat caaggagaag 600
catggatttg attatgcaaa ggattacttc acagacttaa tctaatacga gagcatactc 660
gag 663

```

```

<210> 301
<211> 412
<212> DNA
<213> Mus musculus

```

```

<400> 301
gaattcggcc aaagaggcct agatgaagtt cactgtggtg gcggcggcgt tgctgctgct 60
gggcgcggtg cgggccgagg aggaggacaa gaaggaggat gtgggcacgg tggtcggcat 120
cgacttgagg accacctatt cctgcgtcgg tgtgttcaag aacggccgcy tggagatcat 180
agccaacgat cagggcaacc gcatcacgcc gtcgtatgtg gccttcactc ctgaagggga 240
gcgtctgatt ggcgatgcgg ccaagaacca actcacgtcc aaccccgaga acacggtctt 300
cgatgccaaag cgcctcatcg gacgcacttg gaatgaccct tcggtgcagc aggacatcaa 360
gttcttgcca ttcaagggtg ttgaaaagaa aactaaaccg cacattctcg ag 412

```

```

<210> 302
<211> 499
<212> DNA
<213> Mus musculus

```

```

<400> 302
gaattcggcc aaagaggcct aggactactc ctttaataatg cagaccttac aggaagagcg 60
gtatagatgt gagcgactgg aagagcagct gaatgacctg acagagctgc accagaatga 120
gatcctgaac ttaaagcagg agttggccag catggaagag aaaatcgcc atcagtcata 180
tgaacgggcc cgggatatcc aggaggtctt ggaggcctgt caaaccgcga tttccaagat 240
ggagctgcag cagcaacagc agcaggtggt gcaactggaa gggctggaga atgccactgc 300
ccgaaacctt ctgggcaaac tcatcaatat cctccttgct gtcattggcag ttctcttggt 360
ctttgtgtca acagttagcca actgtgtggt cccctcatg aagacacgca acaggacgtt 420
cagcacttta ttcttagtgg ctttcattgc ctttctttgg aagcactggg atgccctctt 480
tagctacgtg gtactcgag 499

```

```

<210> 303
<211> 472
<212> DNA
<213> Mus musculus

```

```

<400> 303
gaattcggcc aaagaggcct acatggagtc cccttctttg tttctctgca aagggtcctt 60
gtcacagacc tcacttttaa tctgttgaa ctggtccact gcagcactgc tgacctctaa 120
agaaatgcgc ttctcagctg ctgaaggggc aaaggttctt ctctctgttc ctgaccagga 180
ggagaacctc ctctcctttt cctggtaaaa aggggaaggat gtaaatgaaa attttacaat 240
tgcacattat aaaaagtcca gcgattcact tcaacttggg aagaaagtca gcggcaggga 300
agaaatctat aaggatggct ccatgatgct ccgggccatc accctggaag acacgggatt 360
ctacacgtta caaaccttta aagcacaagg ccaacaggaa gtaacacatt tccatctcca 420
agtatacaag atcgtgacaa agccctacct ccagctcaac cacagactcg ag 472

```

```

<210> 304
<211> 543
<212> DNA
<213> Mus musculus

```

```

<400> 304
gaattcggcc aaagaggcct aagatgacag agggaaaaca taaagacaga ggagctatca 60
agcgaggaga gcgacttata aattgacaat gaaggtgtaa ttgaaccaga cactgatgcc 120
cctcaggaaa tgggagatga aaatgcagag ataaccgagg agatgatgga tgaagcaaat 180
gagaagaagg gggctgccat tgaagcccta aatgatggtg agctccagaa agccattgac 240

```

```

ttgttcacag acgccatcaa gctaaatcct cgcttggtta ttctgtacgc caagagagcc 300
agtgtctttg tcaaactaca gaagccaaat gctgccatcc gagactgtga cagagccatt 360
gaaataaacc ctgattccgc tcagccatac aaatggcgag ggaaagcaca cagactcttg 420
ggtcactggg aggaagcagc tcatgacctt gcccttgccct gtaaaactgga ttatgacgag 480
gatgccagtg caatgctgag agaagtccaa cctcgggctc aaaaaattgc tgaaccctc 540
gag 543

```

<210> 305

<211> 559

<212> DNA

<213> Mus musculus

<400> 305

```

gaattcggcc aaagaggcct atgtcccagg gcccaatata taagcccaag cggaagagag 60
agaaaaagga aaaaaagaag aaacggaagg cagagaaaca tcgtggccga attgggatcg 120
atgaagatga taaggggcct agggcacctc gcccacctca gcccaagaaa tctaagaaag 180
caggtggtgg gggtagcaat gctactacac tcagccatcc tggctttggg acttccggag 240
gaagtagcaa caagctacct aaaaagtctc aaaagacagc tccacctgtc cttcccactg 300
gctatgattc tgaggaggag gaagaaagca ggcccattgag ttatgatgag aagagacagt 360
taagcctgga tatcaataag ttacctgggg aaaagctggg tcgagtagta catatcatcc 420
aagccaggga accctctcta cgtgattcaa atccagaaga aattgagatt gattttgaaa 480
cactcaagcc gtccacactt agagagcttg agcgatatgt tttatcctgc cttcgaaaga 540
aaccctggaa agcctcgag 559

```

<210> 306

<211> 459

<212> DNA

<213> Mus musculus

<400> 306

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gaattcggcc aaagaggcct aaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaccaaccaa ttaaaaacga gctggccac ttatgttgat acgtcagtgt 120
atagttatga atttgctcct catctggctc ccctggggcc tccctaccac aacctttgga 180
acttcacagg cagagatgga gttggtccag cacattggtg tccctgccag taagatcatc 240
tgtgccaacc cctgtaagca agttgcacag atcaagtatg ctgccaaagca cggggtgagg 300
ctgctgagct tcgacaatga agtggagctg gccaaagggtg tcaagagcca cccagtgcc 360
aagatggttc tgtgcattgc taccaggagc tccactctc tgaatcacct gagcctgagg 420
tttggggcgt cgctgaaatc ctgcagacat ctgctcgag 459

```

<210> 307

<211> 434

<212> DNA

<213> Mus musculus

<400> 307

```

gaattcggcc aaagaggcct atgcaaccca aacagcccgg gaccatgctg gcgctccgct 60
ccttgcttcc acacctggga ctgttcctgt gcctggctct gcaattatcc cctccctct 120
ctgccagtga taatgggtcc tgcgtggtcc ttgataacat ctacacctcc gacatcttgg 180
aaatcagcac tatggctaac gtctctgggtg gggatgtaac ctatacagtg acggtccccc 240
tgaacgattc agtcagtgcc gtgaccttga aagcagtga ggaggacgac agcccagtg 300
gcacctggag tggaaacatat gagaagtga acgacagcag tgtctactat aacttgacat 360
cccaaagcca gtcggtcttc cagacaaact ggacagttcc tacttctgag gatgtgacta 420
aaaacaatct cgag 434

```

<210> 308

<211> 499

<212> DNA

<213> Mus musculus

<400> 308

```

gaattcggcc aaagaggcct agtgggtgctt ttttataaag ctgaggtcct gagtgaagag 60

```



```

cccattctga agtgggtataa agacgcacat gttgcaaagg gcaaaagtgt cttccttgag 120
caaatgaaga agtttctaga atggctcaaa aatgctgagg aggaatctga gtctgaagct 180
gaagaagggtg actgaatttt gaaacaacat cctcagtaaa gcaaacagga gttgtagata 240
aaatgtcatg tctcatgtgt cctgggttctt acatcttctt acctccctat atcaagcatg 300
atataagggtt tttcatggca atttttattt taactgtttt tatggttact ggaaatgttg 360
gcttttgggtt ctgaaaccac gtgtgaggag caagctgcag gagccgtaga attgaatctg 420
atgttgcatt ggttttcagt taccttctac ctctgtatt ttctactgta ataatgtgat 480
gtaaggccat ccgtctgag 499

```

<210> 309

<211> 105

<212> DNA

<213> Mus musculus

<400> 309

```

gaattcggcc aaagaggcct agagtggctg ctcttcttgc attccaacac atacttgtac 60
ttctctacca aggaagcaa gatgctcttc cccaagctcc tcgag 105

```

<210> 310

<211> 458

<212> DNA

<213> Mus musculus

<400> 310

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gaattcggcc aaagaggcct aaaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaaccaacca ttaaaaaacga gctggccacc ttatgttgat acgtcagtg 120
atagttatga atttgcctct catctggctc ccttggggcc tcttcaccac aaccttttga 180
cttcacaggg agagatggag ttgggtccagc acattgggtg ccttgccagt aagatcatct 240
gtgccaaccc ctgtaagcaa gttgcacaga tcaagtatgc tgccaagcac ggggtgaggg 300
tgctgagctt cgacaatgaa gtggagctgg ccaaggtggg caagagccac cccagtggca 360
agatgggtct gtgcattgct acccaggact cccactctct gaatcacctg agcctgaggt 420
ttggggcgctc gctgaaatcc tgcagacatc tgctcgag 458

```

<210> 311

<211> 578

<212> DNA

<213> Mus musculus

<400> 311

```

gaattcggcc aaagaggcct atggcttaca agaagaatct cgtcgagcaa cacattcagg 60
acattgtggt gcactacacg ttcaacaagg ttctcatgct gcaggagccg ctgctggctg 120
tggtcgccct ctacatcctg ttcttcaccg tcatcatcta cgtccgtctg gacttttcca 180
tcaccaagga tccagctgca gaagccagga tgaaagtggc ctgtatcaca gagcaggtct 240
taaccttggg caacaagagg ctgggcctct accgtcactt tgatgagact gtcaatagat 300
acaagcagtc ccgggatatc tctaccctca acagtggcaa gaagagccta gagacagagc 360
acaaggctgt gaccagcgag attgctgtac tgcagtctcg gctgaagacg gagggctcag 420
acctgtgtga caggggtgag gagatgcaga agctggacgc ccaggtcaag gagctgggtc 480
tgaagtcggc ggtagaagca gagaggctgg tggctggcaa gctcaagaag gatacgtacc 540
tggaanaacga gaagctcagc tcaggaaaac acctcgag 578

```

<210> 312

<211> 409

<212> DNA

<213> Mus musculus

<400> 312

```

gaattcggcc aaagaggcct acctaatggt tcacagaaca ccggtggcgg ttacaaaatt 60
tgaactacag ttcccaagcc atagtaattt tttttttttt tttttgaatt agcgcagtcg 120
ggtttttaac cgcccgcgca tgcgcccttc aactttccgg tgacaagtac agcgtgcgtc 180
ctgtagcagg cggcgggctc atggcttttc tcttctcagc cgtgccaggg ttgcaggggc 240

```

ccactgcatg gaggaggcct ctacaggac tatggtgctg ctctgggag ggggattcca 300
 aaaggtgggt ggggagcagg tctccccact cacgggagaa gtcaccagg accgagaccg 360
 aaacattcca tacaatctac cggttccgag ccacccgagc agtctcgag 409

<210> 313
 <211> 443
 <212> DNA
 <213> Mus musculus

<400> 313
 gaattcggcc aaagaggcct accattatctt cccaggccat ggctttgaac tctttgttct 60
 acattctgat ttccttgccct ttcttagtgg gattgggact aaactcacag gcctcactat 120
 ctaatggagt ctgcctaagg ggtgggtggg caggcaaagg catctcatgc tctgatggct 180
 tccccaatag ctccctcatg gcagctgatt ctgtactgag actggcctat catttaagac 240
 actccctaga agacacttct caaaaatctc ctctggccgt ctgcttctgc tccctttttg 300
 ttgttactg ctcagctgag tgggtgactc ctcaaaacct agtgtcacat agcagttgtc 360
 taggaacaga tatgtcctgg ggtcccaact ggtccctgat tggcaaatgt gtctcagtag 420
 acaatcgagc taacctactc gag 443

<210> 314
 <211> 491
 <212> DNA
 <213> Mus musculus

<400> 314
 gaattcggcc aaagaggcct acagaggttg ggaaagacga aagcgtaatc acagaagaaa 60
 tgaatggtaa agagatgtca cccgggcatg gtcctgggga gactcgtaag gtggagcctg 120
 tggcacacaa agactccacc tcctgttctt ctgagagcag cagcagcagc agtgagagtg 180
 aggaggatgt gggagagtac cagccccacc accgagtgcg cgaggggcacc ataagggaag 240
 agcaggagga gtgtgatgaa gagctggagg aagagcccg ccaaggagcc aaggtagtag 300
 agagggaggc agcagtgccc gacgccgtcc cagacagaca agcagggggc agtgtgtctc 360
 cagtagaaac agaggccagc gaacatgtag ttgcccaaaa gttacctgga gaaaagggtg 420
 cacacggagg cactgctgag caggaccgga gagaagaagc agaggaagac ccgcacagag 480
 ttaaaactcga g 491

<210> 315
 <211> 593
 <212> DNA
 <213> Mus musculus

<400> 315
 gaattcggcc aaagaggcct atgacactag acagagcaac tccagcggtta ccgctcccgc 60
 tcctgggttc tcggcttctc atcgagctca atcttggaact ttggggtttt gctactgtca 120
 gaaggacttc tttctgtctc aagtgttga caacgcaccc ctttatcagg gtatcagagc 180
 atcgccacag aatgaagctg gtttccatca cctgatgtt attgggttca ctgcgtttcc 240
 taggcgcgga cactgcagg ccagatactc cttcgcagtt ccgaaagaag tggaataagt 300
 gggcgctaag tcgtgggaag agggaaactac aagcatccag cagctaccct acgggactcg 360
 ctgatgagac gacagtctct acccagactc ttgatccatt cctggacgag cagaacacaa 420
 ctggccccct acaagccagc aatcagagcg aagcccacat tcgtgtcaaa cgctaccgcc 480
 agagcatgaa ccagggttcc cgcagcaatg gatgccgctt cgggacctgc acatttcaga 540
 aattggccca ccagatctac cagctaacag acaaagacaa ggtacagctc gag 593

<210> 316
 <211> 431
 <212> DNA
 <213> Mus musculus

<400> 316
 gaattcggcc aaagaggcct aattgaattc tagacctgcc ttcaactagg atggcctctc 60
 caggaatgct gctggggctg ctgttgactt cctgtttaac tctctgcctc agctgtcaga 120

```

actcaaataa ttttgcactc accaaccagc agaagagcat ccaccaggaa tcagatacaa 180
aggagaccag ggaagaggag gagctagaca ccgagatcct ggagggtgtc caccacaactc 240
aagagtggca gacccttcaa ccaggtcagg ctgttcctgc aggatcccat gtgcgaatga 300
acctacagac tggagtaaac gaggtgaagc tccaacaaga agacaaattt caaaataatc 360
tgaaaggatt taaaagaggc agaaggctgg acatcaacgc caacacatac acatctcagg 420
atcctctcga g                                     431

```

<210> 317

<211> 474

<212> DNA

<213> Mus musculus

<400> 317

```

ggaaaagtat ggcaaaccac ataaacggaa aggttttaat gaaggattgt gggagataga 60
taacaatccg aaagtgaat tttcaagtca acaggcatca actaaacaat ccaatgcac 120
gtctgatgtt gaagtgaag aaaaagagac taacgtttca aaggaagaca ctgatcagga 180
agaaaaggcc agcaatgagg atgtgactaa agcagttgac ataaccactc caaaagctgc 240
caggcgagga agaaagagaa aggctgaaaa acaagtagac actgaagagg cggaatggt 300
gactgcagca accgcttcta atgtgaaagc aagtcctaag agaggacgac ctgcagctac 360
tgaagtcaag attcccaaac caagaggcag acctaaagtgt gtaaacgagc cttgtccttc 420
agacgggtgac atggttattg atgaagataa aagtaaaaaa aaggatgact cgag      474

```

<210> 318

<211> 407

<212> DNA

<213> Mus musculus

<400> 318

```

gaattcggcc aaagaggcct aatttgaaga aagagtattt ggcactgcaa aaagctagca 60
tggcttctct aaaaaaaca atatctcaaa tcaaattgga atcagaaatg gaaacagact 120
gtaaacgccc tacagcaggc agtggtcaag agtggtccac ccaggagaag gtcagtgcac 180
aaggcccaca gtttgtgact ggagtgattg tgaagattgt gagcggagag cctctaccgg 240
gcaggaaaaca agtcaaggat attttggcca caatctcaga agttgtttac attgatttgc 300
tagaaggaga tactgaatgc catgcccgat ttaaaacccc cgaggatgct caggcagtaa 360
tgaatgcaca gactgaaatt aggaagaagc acagttggaa cctcgag      407

```

<210> 319

<211> 572

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (184)

<220>

<221> unsure

<222> (358)

<220>

<221> unsure

<222> (438)

<400> 319

```

gaattcggcc aaagaggcct agtactactt gaaaaaatca ggtttaaaat gctctggctg 60
ctganaacaa tgtgccttat tcatgtactt ggtaaaatat tttgtttatt tggaccaaag 120

```

```

aagaatcctg aagctcacat gaatgttagc gagattatta aacactggga ttatccaagc 180
gaanaatatg aggttgtgac tgatgatggc tacattcttc caattaaccg aattcctcat 240
gggaagaaca atgctaatag ttcagcccca aagatggtag tattttgtca gcatggcttg 300
cttgcaacac ctggagcaag ggtttccaat ccgcctgtca acagcctggc cttcatcnta 360
gcagatgctg ggtatgatgt gtggatggga agcagcagag gaagtacctg ggcaaagaaa 420
cacgtggccc tcaaccnnga ttctaaagaa ttctgggatt ttagttttga tcaaatgata 480
aaatatgacc ttccagctac cattaatttc attctggata aaacaggaca aaagcagatt 540
tactacattg gccattctca aggaaactcg ag                                     572

```

<210> 320

<211> 353

<212> DNA

<213> Mus musculus

<400> 320

```

atagccacca gctgagcatg gtccatgcct gggaggtaga gatggccctt atagattttt 60
ccaaaggtag attcacccaa ttcttccatg aaacgcacag cggaaagagg cagctcttta 120
gccttgctct tgggcttgta tgcattgagc atggacatct ccacattctg tcctctgacg 180
ggttttggtc gcctctggac tgggtggtgat gaagacttct gggtattgctg gcacacacag 240
atgaagaaga agaggaaggc gatagccagg ggaatggcca cacttggcac cagaatgtac 300
aagatttcca ttttattctt ctctttggaa tctaggectc tttggccgaa ttc          353

```

<210> 321

<211> 451

<212> DNA

<213> Homo sapiens

<400> 321

```

gaattcagcc ttcattggcct aggtgtcttt ctgtgtaaga gtagtaacat ttataccttc 60
tcgttgcttg tgggtgttct aacaataaat tatatggatt tcttttgaag ttgattgtga 120
agaaaatgac taagaaaact ttttttttct ttttaggttg atggaaatca caatcttctg 180
acaaagcttt ctctggaaga ggaaaactgt cttattcagc tgaagtgtga aaaccttcaa 240
caaaaattag aacagatgga cgcagaaaat aaagagcttg agaagaagct ggcaaaccas 300
gaagaatgtc ttaagcacag caatcttaag tttaaagaga aatctgcaga atatacagca 360
ttggccagac aactggaagc tgcttttaga gaaggaagac aaaagggtgc tgaagaaata 420
gagaaaatgt catctagaga gtgtgctcga g                                     451

```

<210> 322

<211> 307

<212> DNA

<213> Homo sapiens

<400> 322

```

gcgattgaat tctagacctg cctcgagcct cccaaagtgc tgtgattaca ggagtgaagt 60
gccacgcccc gcctacaagt ttttctttaa ctactgcttt agtcaacct atcctctagc 120
ttctgatatt ttcattgttt gttgtcattt tctagatatt caacaatttc aaattagatt 180
ttctcttcga ctaaagtgga agaatttttt ccggtttatt ttctacatgc taaagatttt 240
tattttcatt ttgttattaa tttctagtgt taccgtattg tcattagaaa atatgggctg 300
gctcgag                                     307

```

<210> 323

<211> 244

<212> DNA

<213> Homo sapiens

<400> 323

```

gaattcggcc ttcattggcct acaaaattgt gtcttttttt tggcaatgtt gtcttgccaa 60
tccctccctc cccagctctc ccgaacagca ggatttccca acggcagctt gggaaaaaga 120
cccagtgcca gcttggggaa aagaccagc gctccgttta gaagcaacgt gtatcagcca 180
actgagatgg ccgtcgtgct caacggtggg accatcccaa ctgctccgcc aagtcacact 240

```

cgag

244

<210> 324
 <211> 295
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (89)

<220>
 <221> unsure
 <222> (116)

<220>
 <221> unsure
 <222> (119)

<220>
 <221> unsure
 <222> (122) .. (123)

<220>
 <221> unsure
 <222> (125)

<220>
 <221> unsure
 <222> (127)

<220>
 <221> unsure
 <222> (140)

<220>
 <221> unsure
 <222> (155)

<220>
 <221> unsure
 <222> (157)

<400> 324
 gaattcggcc ttcatggcct aggtagaggt agtttcttaa aggttggttg ccagtgtgga 60
 atctgaaact atatcaatga actttctgna ctttattgca ttaaaatcca tcagntanc 120
 tnnngnanttt tcttcttttn tttttttttt ttttngngag tctcattctg tctcccaggc 180
 ccagtgagcag tggcacagtc acattcactg cagcctcaac ttctcaactc aagagatcct 240
 gccacctcag tgccccact ccaccacca tgagctgaga ttgcaggaac tcgag 295

<210> 325
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 325
 gcaaacagac aaggcttaca ggtagttca ggatctgcgc cttatcaagc aaattgtttt 60
 gcctatccaa cctgcggtgc caaacccata tactctocta tcttcaatac ctccctccac 120
 aaccctccca taaccatta ttcgggtctg gatctcaaac atgctttctt tgctattcct 180
 ttgcattcct catcccagcc tctctttgct ttcacttggg ctggccctga caccatcag 240

cctcagcaac ttacctgggc tgtactgccca caagccttca cggacagccc ccattacttc 300
agtagccctc gag 313

<210> 326
<211> 538
<212> DNA
<213> Homo sapiens

<400> 326
gaattcggcc ttcatggcct agtgtatata tatggaacat tattcagcca taatgaggaa 60
taaagcatga cacatgctac aacgtggata aatatcaaaa acattctgct aaatgaaaga 120
agccagacac taaagatcac atagtatata aatccattta tatgaaatat ccagaatagg 180
taaatccata gcaacagaaa gcagattggt ggttgccagg ggctagttag aggggggaaat 240
gggactaaat gcttaatgaa taagggttcc ttttgagatg agtttccctt cgacattttg 300
gaactagata aaggtgatga ttgtacacaa cactgaaatg ttcattttaa aatgttaatt 360
ttggctgggc acggtggctc atgcctgtaa tcccagcact ttgggaggcc aaggggggca 420
aatcacagg tcaggagttc gagaccagcc tggccaacat ggtgaaaccc catctctcta 480
aaaatacaaa aaattagcca ggcgtggtgg tgggtgccta tagtcccagc tactcgag 538

<210> 327
<211> 326
<212> DNA
<213> Homo sapiens

<400> 327
gtcgaccttt ctataaatac atattgttta aaaaaaagca agaaaaaag gaaaacaaag 60
gaaaatatcc ccaaagtgtt tttctagatt tgtggcttta agaaaaacaa aacaaaacaa 120
acacattgtt tttctcagaa ccaggattct ctgagaggtc agagcatctc gctgtttttt 180
tgttgttgtt ttaaaatatt atgatttggc tacagaccag gcagggaaag agaccggta 240
attggagggt gaccctcggg gtgggggcag gacgccccg tttcggcaca gcccggtcac 300
tcacggcctc tttggccctc gagaca 326

<210> 328
<211> 456
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (242)..(243)

<220>
<221> unsure
<222> (425)

<400> 328
gaagacgctg ctgttgcgt tatggaacaa ggagtaccag aaaaggaaga gacaccacct 60
cctgttgaac cagaagaaga agaagatact gaggatgctg gattggatga ttgggaagct 120
atggccagtg atgaggagac agaaaaagta gaaggaaaca cagttcatat agaagtataa 180
gaaaaccctg aagaggagga ggaggaggaa gaagaggtag aagaagatga agaaagtga 240
gnngaggtgg aagaggaggg agaaagtga ggagtgaa gtgatgagga agatgaaaag 300
gtgtcagatg agaaggattc aggggaagaca ttagataaaa agccaagtaa agaaatgagc 360
tcagattctg aatatgactc tgatgatgat cggactaaag aagaaagggc ttatgacaaa 420
gcaanccggt cgacggcctc tttggccctc gagaca 456

<210> 329
<211> 461
<212> DNA
<213> Homo sapiens

<400> 329

```

gaattcggcc aaagaggccg tgacgcccag tctcctcaag aagttccgag gagccagctg 60
gagattcaca ttttacctga ttgccttcac tgccggcatg gccgtcattg tggataaacc 120
ctggttctat gacatgaaga aagtttggga gggatatccc atacagagca ctatcccttc 180
cccgtattgg tactacatga ttgaactttc cttctactgg tccctgctct tcagcattgc 240
ctctgatgtc aagcgaaagg atttcaagga acagatcatc caccatgtgg ccaccatcat 300
tctcatcagc ttttcctggg ttgccaatta catccgagct gggactctaa tcatggctct 360
gcatgactct tccgattacc tgctggagtc agccaagatg ttttaactacg cgggatggaa 420
gaacacctgc aacaacatct tcatcgtctt cgccattgtt t 461

```

<210> 330

<211> 390

<212> DNA

<213> Homo sapiens

<400> 330

```

gtcgactatc gcccgtcttg ccgcctcaac ttccgctca atgtcgtgga gaacctcgcg 60
ttgctagtgc tcacttatgt ctctcctcc gaggacatca ccatccacga aaatgctttc 120
attgtgttca ttgcctcatc cctcgggcac atgtcctca cctgcattct ctggcggttg 180
accaagaagc acacagatcg caagtctac agctggaaac agcggctctt catcatcaac 240
ttcatctcct tcttctcggc gctggctgtc tactttcggc acaacatgta ttgtgaggct 300
ggagtgtaca ccatctttgc catcctggag tacactgttg tcttaaccaa catggcgctc 360
cacatgacgg cctctttggc cctcgagaca 390

```

<210> 331

<211> 452

<212> DNA

<213> Homo sapiens

<400> 331

```

gaattcggcc ttcatggcct acattgttct gtactagtgg ttctcaaagt gtggtccctg 60
gaccagcagc atcagcattg cttgggagct tgttaaaatc tcaggcccca tgacagggtc 120
attgaatcag acacttaagg atgaggcccg gaggtctgta ttttaacaag cctgtatgtg 180
attgtgatcc aggcctaaagt ttgaaaattg ctgcttcaaa ccagggttg caaactatag 240
ctctgcaagc tggatctgtt tttgtaaatg aagttttatt ggaatatag cacaccatt 300
catttatgga ttgtctgtgg ctacttttgt gctacaaagg cagagccaca aaggccaaac 360
tatttaccat ctgaccttt acagaaaatg tttgccaaact cctgctgtat accattgggt 420
tggaggaatg aaggaggtag gtgggactcg ag 452

```

<210> 332

<211> 535

<212> DNA

<213> Homo sapiens

<400> 332

```

gaattcggcc ttcatggcct agacggcggg gtcgccgggg gcttcggggg ggcctcggcc 60
caggccatcc agccctgtga accgaatgga gtcccacacg ctgttgaggt agttgtgggt 120
tcccctggcc tcgggctcgg cgcagggtca gcgtcctgc aggcggcgtc tcgggtacgg 180
gctggcgaaa gtggagacgg acggcaggat ggattcactt ggcgacatgg cggggagctg 240
ggaagacgga caccggtgag tggctgcccg ggagggtctg tcggggcgcg gacaggcggg 300
catggttctg ccaaggattt tgctttattt atcgcaagat ggggggtattt cctccttctc 360
gcagtttata attgcatgaa ttagtgagcgt gaattgagga tgcagtaaaa atatcttcaa 420
agattattaa attcgttatt ataaaacaca tagaagagtt tatgtgtgtg tatggaaagc 480
aggtatacat caataattct taatgaatac aagaaagaac taccaatctc tcgag 535

```

<210> 333

<211> 629

<212> DNA

<213> Homo sapiens

<220>

<221> unsure
<222> (200)

<220>
<221> unsure
<222> (202)

<220>
<221> unsure
<222> (364)

<220>
<221> unsure
<222> (393)

<220>
<221> unsure
<222> (571)

<220>
<221> unsure
<222> (594)

<400> 333
gaattcggcc ttcatggcct acatgcttgg tggagctaca gcagacctgt ggagtggag 60
agtaaggcgg gctctgcagg gcagtgggcc gggaccatga gagaggcggg tcagtctggg 120
ctccaagctc agcctctcgg attccccggg acccacggct tataatgcgc ttaaattcca 180
cgctcgcgcc gagagacagn angtcaccgt caccgtcacc gcctagcgcc cttgaccgcg 240
tcccactccg ctgcagcgga ggggtgtgtga gggagaggac gcagggaggg aaaagcggtg 300
ggaggggcaa catcttttca taagcttttc cccttctata tgccatctct gatgggagcc 360
tcntagatc tttcgtccat ttactaattg ggntgttcga tttcttattg ttgagttgta 420
agtgggtttt aatgggtctg atgccagaca ggtgttttgc aaatattttc tccgtctgtg 480
gcttgtttct ccattctctt atttcctttc ccagagcaaa agtttttaat tgtaacgact 540
tcataccaat atcttctttc atggtagaaa nttgtctttt atgtacttta ctgntgtatc 600
tacaaagtaa ttgccaaacc caactcgag 629

<210> 334
<211> 329
<212> DNA
<213> Homo sapiens

<400> 334
gcttcatggc ctacaagcaa atcatttcaa tcttggagtc catgtcaa at gacacgagcc 60
ttcctgacaa gtgtaactca ttcctacaca acaaggcgga gtggaggtgc gaaattgagg 120
caactcttga gaggctaaag aaactagagc gtgatctcag ctttaaggag caggagctta 180
aagaacgaga aagacgttta aagatgtggg agcaaaagct gacagagcag tccaacaccc 240
cgcttctctt gcctcttgct gcaagaatgt ctgaggagtc ttactttgaa tctaaaacag 300
aggagtcaaa cagtgcagat tcactcgag 329

<210> 335
<211> 556
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (131)

<400> 335
gaattcggcg ttcatggcct aaatcctctc taataaataa tataggccag gcgcggtggc 60


```

tcacacctgt aattccagca ctttgggagg cggaggtggg cggatcatga ggtcaagaga 120
tcgagaccat ncctggacaa gatgatgaaa caaaaattag ctgggctgtg tggcgacgc 180
tatagtccca gctactcagg aggctgaggc aggagaatag cttgaatccg ggagacggag 240
gttgacgtga gccgagatgg cgccactaca ctccagcctg gcaacagagc aagactctgt 300
ctcaatgaat aaataaataa ataatatagc cataaaatta tataattcca tgtttgtttt 360
tattagttta tttagaataa atatcttaaa ataagttttt atacaatctc attattttta 420
actcagaaaa taattcagat agaagttcgg atctccacga aataacattt aattgggtca 480
tcaaaaagag cataccatct ttattaaaac actgccatta atgcttttat ttttgcat 540
agccagtctc ctcgag 556

```

```

<210> 336
<211> 594
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (311)

```

```

<220>
<221> unsure
<222> (339)

```

```

<220>
<221> unsure
<222> (547)

```

```

<400> 336
gaattcggcc ttcattggcct agttgaatta cttttatatt cagaaaaaag catattttta 60
ataaaaaatt gatttcctct aggttggtta aatgctcagt gaaaggttga agaattcttc 120
agaagaaga aaggagcctc agagacagag acctgtctcc ccagaggaga tggagacaga 180
gtggagcctg actgcctgga gtcgttctgc tgggagaaa cctggttgct gtggcacatg 240
cgtggcaggc tggaaatgat accctgtggg tatggtgctc tgttctgcat taattcaggc 300
tccaggctcc ntacatctcc tgtaaggacc agggagcang cagctgcagg agaaggggga 360
tgcggggggc catgggatta caaattctca cagcagccga gcccaggcag agaaaccctc 420
cctgtgaagt gatttgaata gtgtccttcc cccatacccc ctaaaaaactg acgtccactt 480
ggaacctcag aatgagaact tattgggaaa tagggatttt tgcagatgta atgatttgag 540
gatgtcnggg ttaaaatgat cagactgggtg tctttataag agtaaaagct cgag 594

```

```

<210> 337
<211> 331
<212> DNA
<213> Homo sapiens

```

```

<400> 337
gaattcggcc ttcattggcct actacaattc tcataacttc caaaatctat tttcttctc 60
ataacctgac catatacctt ctgctcccta gatcctttgg ctagactcac tcttttttga 120
gtctcccaaa ttaccattgt tcccggcctg gacttcaatc cagcctgtca cattattcct 180
gataccacac ctgaccccca tgactgtatc tctcgatac acctggcatt cgctccattt 240
ccccaatttt tcttcttttc tgttctctac cctgatcaca cctggttttag tgatggcagt 300
tccaccaggc ctaatcaaca cacacctcga g 331

```

```

<210> 338
<211> 522
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (31)

```

<400> 338

```

gaattcggcc ttcattggcct agctttgaag naactgtgat gtgtctgatt gcttaaaacc 60
aatcactttt gggacttaga agtgggagaa aggattctct caggggccatg tggcatgggtg 120
ccgtatcacc gcctgtcatt cacacatgca gggagggcac cgggagaaaa tctttaaaat 180
attggcatgc cataaggga gggtttatgg gttgtttttt tttttttttt tttttttgac 240
tgttcacttt gtggggtgat taaacaaaaa aacctcagcc attattctct aacagctggt 300
gtgccttacc tcaataaagt gccttttacc ataacacagc atcttttagac tctataaatc 360
tctttctatt tattgtgttt aaatgataaa tgctttccaa taaaatgaca tcatgggtct 420
ggagagtgat gttcattttc tgagttactc ttaaatttgg ttgatttgaa tttttttatt 480
aggatgttgt ataatatgaa tctcagccac aggcttctcg ag 522

```

<210> 339

<211> 565

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (105)

<400> 339

```

gaattcggcc ttcattggcct agagtgtttg aacctttctt taaatttatt tttatagaaa 60
aggataaaca cattcttata catattatct gggaaacgcag ggaangtatt atgtatccca 120
cagggttctgt ttggtcttag agaagcacag aaacatgatt taaattgcta aacctgccaa 180
taccattaga aaaaaaatca gaaatttctt tggcacaaaa ctctccattg gttataaaag 240
gactaagagg tggagaactg ttttatatat tttatataca caaagacatg tgtaaatggt 300
tccagaattt gtcataagctt aactgaaaga aagtaaaagg atcacttagt gccttcttac 360
agtgaagtat aaggtatcatt tagtgtcttg tttacaattt agcaatagat tatctggtag 420
aatgtggagc agaaaggact cagttcatct catgggtaac tcaaccctaa tttgtcaaaa 480
ataaaaaaaa gtgacgtaaa aagagttcct ttaaataagt tgaaatgact ttttagtaaa 540
gttttatttg caagctgaac tcgag 565

```

<210> 340

<211> 616

<212> DNA

<213> Homo sapiens

<400> 340

```

gcaaaaacag gaaatggagg ttaagatgga ggaggaaact gaggtaaggg aaagtggaga 60
gcagcaggat agtcagcctg aagaagttat ggatgtgcta gagatgggtg agaagtgtca 120
acatgtaatt gctgaccagg aggtaatgga aactaatcga gttgaaagt tagaaccttc 180
agaaaaatgaa gctagcaaag aattggaacc agaaatggaa tttgaaattg agccagataa 240
agaatgtaaa tccctttctc ctgggaaaga gaatgtcagt gctttagaca tggaaaagga 300
gtctgaggaa aaagaagaaa aagaatctga gccccaacct gagcctgttg ctcaacctca 360
gcctcagttc cagccccagc ttcagcttca atcccagtc caaccagtac tccagtccca 420
gcctccctct cagcctgagg atttgtcatt agctgtttta cagccaacac cccaagttac 480
tcaggagcaa gggcatttac tacctgagag gaaggatttt cctgtagagt ctgtaaaact 540
cactgaggta ccagtagagc cagtcttgac agtacatcca gagagcaaga gcaaaaacaa 600
aaccaggagc ctcgag 616

```

<210> 341

<211> 344

<212> DNA

<213> Homo sapiens

<400> 341

```

gaattcggcc ttcattggcct agaaatcatt catatttatt atcattctgc atgttcagcc 60
tttttcttcc cttagaatca gtcttgatta cttttaaagg gactttacta atctttatct 120
tcctctccat cctgccatca ctgacctgcc tcaatccctg ttcaactctc tcttattcag 180
tctcctatgt ggattgtccc actgccttct gtcctctgcy cagccacaag gcagtctatt 240

```

taggatgcag atctgtttct gtcacccac tgctagaccc ccgcagtggc tcctcacaac 300
cagcctatag cagacaagct tttattagag cagacagact cgag 344

<210> 342

<211> 286

<212> DNA

<213> Homo sapiens

<400> 342

gaattcggcc ttcattggcct acactgattg tttctcattt ttttccatct gctacctcat 60
tatatctacc aagatatcaa tccacttaac ttttttttcc tgaaccattt cacggtaagt 120
tgcagacagg atagcccttc accttaaata attcagtgcata taaactccaa gaacaagaac 180
atgtttttacg tgaccacagt gcataattat caaaatcata atggtgcata ctactatcca 240
gttgtgggtgt atgatttttaa tatgttatat agagagaaac gccgag 286

<210> 343

<211> 338

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (194)

<400> 343

gaattcggcc ttcattggcct agcttgggtct tcccccgtaa ggaaatggcc ggggagctcc 60
aggggaccca ggcgcgctcg ctctggcgga gcctgggctg accagccagg acagcggggt 120
aaacccgaac aattctgcgc gaggtaggga ggccatggcg tccggcagta actggctctc 180
cgggggtgaat gtcttgctgg tgatggccta cgggagcctg gacttgaaag aggagattga 240
tattcgactc tccagggttc aggatataca gtatgagccc cagctccttg cagatgatga 300
tgctagacta ctacaactgg aaacccaggg ttctcgag 338

<210> 344

<211> 277

<212> DNA

<213> Mus musculus

<400> 344

gaattcggcc aaagaggcct aaataattgt tggcaaagat ccttttgctt ttttcggcat 60
gcaagctcct agcatctggc agtggggcca agaaaataag gtttatgcat gtatgatggt 120
tttcttctcg agcaacatga ttgagaacca gtgtatgtca acagggtgcat ttgagataac 180
tttaaatgat gtgccagtgt ggtctaagct ggaatctgga catcttccat ccatgcaaca 240
acttgttcaa attcttgaca atgaaatgaa actcgag 277

<210> 345

<211> 291

<212> DNA

<213> Mus musculus

<400> 345

gaattcggcc aaagaggcct aaccgcagca agttaagatc tgtgtctgtg gacctgaatg 60
ttgacctatc gcttcagatc gacatactcg atgcactcag tgagagagat aaggtaagt 120
ttacagtgcata caccaagacc acactgtcca catttcagag cccagagttt tctgtttaca 180
ggcaacatga agactttgtg tggctgcatg acactcttac tgaaacaacg gattatgctg 240
gccttattat cctcctctgct cctacaaagc cagactttga tggcctcga g 291

<210> 346

<211> 438

<212> DNA

<213> Mus musculus

<400> 346

```

gaattcggcc aaagaggatt gaattctaga tctgcctcga gactgttcgt gatgagtggg 60
ccctggaaaa gactaataat cctcttaagt tgcgcttgcg tcgcaagagc gactcagaac 120
agagacatca accctcatal tccaattcaa caatcctggg aagtgcctaa tgaggagggg 180
gacactgtat ggtcgaccac cgcagtacaa ccccatgga cctggtggcc cgacctcaca 240
cctgatattt gtaagttagt agcagggtca cttacctggg acctccccga ccatacggac 300
cttcataaac caccacctga taaacagtgt gtcccagcgc ggatagggag cacgtttgga 360
tgctcaggac agttctaccg agccaatcct cggctctgcag aattttatgt ttgccctggc 420
caaggccaac cactcgag                                     438

```

<210> 347

<211> 664

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (9)

<220>

<221> unsure

<222> (108)

<220>

<221> unsure

<222> (125)

<400> 347

```

gaattcggnc aaagaggcct aggagcttgg aagactttgc aactttggac caagcacaat 60
gaagtattcc ctctgggctc tgcgtcttgc cgtgctgggc acacagcngc tgggaagcct 120
gtgtncacc gttcgggtccc agagggtccc aggaaggata cagcaggaac gaaaaaacat 180
cagacccaat attatccttg tgctcactga cgaccaggat gtggagctgg gttccctgca 240
agtcataaac aagacgagaa agatcatgga acagggtggg gccaccttca ccaatgcctt 300
tgtgaccacg cccatgtgct gtccatcacg ctcatccatg ctccactggga agtacgtgca 360
taaccacaat gtctacacca acaatgagaa ctgctegtct ccctcgtggc aggcaatgca 420
cgagcctcgg acctttgctg tgtatctcaa caacaccggc tacagaacag ccttttttgg 480
aaaataacct aatgaatata atggcagcta catccctcct ggatggcgag aatggctcgg 540
attaatcaag aattctcgtt tctataatta cactgtttgt cgcaacggca tcaaggagaa 600
gcatggattt gattatgcaa aggattactt cacagactta atcactaacg agagcatact 660
cgag                                     664

```

<210> 348

<211> 459

<212> DNA

<213> Mus musculus

<400> 348

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gaattcggcc aaagaggcct aaaaaaacca aacaacaaaa acaaaaaaca aaaaaccccc 60
aaagccaacc aaccaacca ttaaaaacga gctggccac ttatgttgat acgtcagtgt 120
atagttatga atttgctcct catctggctc ccctggggcc tcctcaccac aacctttgga 180
acttcacagg cagagatgga gttggtccag cacattggtg tccctgccag taagatcatc 240
tgtgccaacc cctgtaagca agttgcacag atcaagtatg ctgccaagca cggggtgagg 300
ctgctgagct tcgacaatga agtggagctg gccaaagggtg tcaagagcca cccagtgcc 360
aagatgggtc tgtgcattgc taccaggac tccactctc tgaatcacct gagcctgagg 420
tttggggcgt cgctgaaatc ctgcagacat ctgctcgag                                     459

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<210> 349

<211> 568

<212> DNA

<213> Mus musculus

<220>
 <221> unsure
 <222> (120)

<220>
 <221> unsure
 <222> (165)

<220>
 <221> unsure
 <222> (391)

<220>
 <221> unsure
 <222> (478)

<400> 349
 ctcgagggat ggtgccgctg tactgcctaa atgtgttggc ggcggtggtg ccacagggtg 60
 agatgctgca tgagaagata tctgagaatg gaaagcatgg acaggatgcg gaatcacgtn 120
 atccacttga gggggaggct gagtctgggg aggggcattt ccatnagagt gatggcaagc 180
 tgaggcttga tgggtgcagtg gtcttgtcaa ggaagcatac ggaggtggca tgtagtgccg 240
 acatgacgaa agagaaggct gtggaggggg ctggggctgg ggctgggcaa ccatgctgga 300
 gccatagcca tctattgata atggctgagt cggggcagca gcagcctgat ggccaaagac 360
 tgcggcgccg gcaagatggg caagtgtcgt ngctctccgaa ctgcccggaa gctccgcagt 420
 caccgacggg accagaagtg gcatgacaaa cagtacaaga aagcccactt gggcacancc 480
 ctgaaggcca atccgttttg ggtgacctct catgcaaagg gaattgtgct ggaaaaagca 540
 ggggaagtag gcctcttttg ccgaattc 568

<210> 350
 <211> 447
 <212> DNA
 <213> Mus musculus

<400> 350
 gaattcggcc aaagaggcct aaaagacaac ggacaagcgc catttaccat cattcctgtg 60
 ttttcagatc tttcaatcct tgggatggag cccatgagaa atgccaccaa aggctgcaat 120
 gagtctgtag atgaggtcac ggggccatgt agctgccagg actgctccat cgtctgtggc 180
 cccaagcccc agccccacc cctcctatg ccttgaggga tctggggctt ggatgccatg 240
 tatgtcatca tgtgggtcac ctacgtggca tttctgtttg tgttttttgg agcactgttg 300
 gcagtgtggt gccacagaag gcggtacttt gtgtctgagt acactcccat tgacagtaac 360
 atcgcccttt ctgtgaatag cagtgacaaa ggggaagcct catgctgtga cccacttggt 420
 gcagcatttg atgactgtca actcgag 447

<210> 351
 <211> 156
 <212> DNA
 <213> Mus musculus

<400> 351
 gaattcggcc aaagaggcct aattgaattc tagacctacc ctggcttgtg gatgactggg 60
 acttgatcac cagacagaag cagctttttt atcttcctgc caagaagaat gtggattcca 120
 ttttgaggga ttatgcaaat tataagaagt ctcgag 156

<210> 352
 <211> 434
 <212> DNA
 <213> Mus musculus

<400> 352
 gaattcggcc aaagaggcct agccaagcag gagagaagag gctttcagtt cataaagacc 60

```

aaccagcaca ctgcaaggac catgaggcca ctgtgtatga cctactggtg gcttggactg 120
ctggccacgg tccgagctgc tacaggccca gaggctgacg ttgagggcac agaggaggtt 180
cacagagaga gtacatttac ctcaacaggt acaagcgggc aggtgagtc cccgacaagt 240
gcacctacac ttctattgtg cccagcagc gggtcacagg tgccatttgc gtcaactcca 300
aggagcctga ggtgcacctg gagaaccgtg tgcacaagca ggagctggag ctgctcaaca 360
atgagctgct taagcagaag cggcagatcg agacgctgca gcagctggta gaggtagaca 420
gaggcactct cgag 434

```

<210> 353

<211> 471

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (9)

<220>

<221> unsure

<222> (20)

<220>

<221> unsure

<222> (30)..(31)

<400> 353

```

gaattcggnc aaggaggccn actttttggn nccttcttca gttcctggac tgatttccct 60
caaagttagg cgttctgtgg atgcacagac agagagatga gatgactaaa gcttttgcctg 120
ccctgaaaag catgatgggt tccagatggt gaccattgag ccagaagggt tatattcacc 180
tgagtgtgag ttgtctaagt gtaattgttc ctatgcccta gttctttaac gttaacataa 240
aaatgcattt attagttttg aaccttttag aattttgcag ttaggagaat ttgaattatt 300
agaaagacct tgaactttta aagtgttaat ttttttaaac caggagaaat ttacttttta 360
tataaatatt tagtattagg atattaacct gagattttga agacaaagaa aggaaagttg 420
tgatttaaca gtgagggtatt tgtgtgttct atttacacag gaaatctcga g 471

```

<210> 354

<211> 421

<212> DNA

<213> Mus musculus

<400> 354

```

gaattcagag gccccagtct gtagtcccgg aagaatgaag atttaaatac gaggccatgg 60
ctaaacatct gaagttcatt gccaggacag tgatggttca ggaggggaac gtggaagggtg 120
cctaccggac cctgaacaga atcctcacca cggatgggct taccgaagtc ataagtcgac 180
gacgctacta tgagaagcct tgccgcccgc gccagcggga gagctatgaa acatgccgga 240
ggatctacaa catggaaatg gctcgaaga ttaacttctt gatgcgaaaag aaccgtgcag 300
acccgtggct gggctgctga ggcttggggc taggcaccca cacacccatg tccaactcct 360
ttctttatcc agccaagttc tgttactttt ctctataata aaaactccat cacaactcga 420
g 421

```

<210> 355

<211> 408

<212> DNA

<213> Mus musculus

<400> 355

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gaattcggcc aaagaggcct aaagggtttc aagctttcag ttttgggaca ggtatggatg 60
ataaagggca cctgagcaat gaggaagcac ccaaggctat caaaccacc agtaaggagt 120
tcaggaaaac ctgggggtttt cgaagaacca cgattgccaa acgtgagggg gcaggagaca 180
cggaggtgga cccagtgag cagcaaccac agcagcataa cctctccctg cgccgcagtg 240

```

gacggcaacc aaaacgtact gagagggtag aagagtttct taccacggtt cggcgccgag 300
 ggaaaaagaa tgtgccggtg tccctggagg attccagtga gccacatct tccacagtca 360
 ctgatgtgga gacagcttcc gaggggagcg ttgaaagcag ttctcgag 408

<210> 356

<211> 434

<212> DNA

<213> Mus musculus

<400> 356

gaattcggcc aaagaggcct atgcaaccca aacagcccgg gaccatgctg gcgctccgct 60
 ccttgcttcc acacctggga ctgttctgt gcctggctct gcaattatcc ccttccctct 120
 ctgccagtga taatgggtcc tgcgtggtcc ttgataacat ctacacctcc gacatcttgg 180
 aaatcagcac tatggctaac gtctctggtg gggatgtaac ctatacagtg acggtccccg 240
 tgaacgatc agtcagtgcc gtgatcctga aagcagtga ggaggacgac agcccagtgg 300
 gcacctggag tggaacatat gagaagtga acgacagcag tgtctactat aacttgacat 360
 cccaaagcca gtcggtcttc cagacaaact ggacagtcc tacttctgag gatgtgacta 420
 aaaacaatct cgag 434

<210> 357

<211> 502

<212> DNA

<213> Mus musculus

<400> 357

gaattcggcc aaagaggcct agtctacaaa gcctggctct gctcccagta ttttgaagtc 60
 acacagttta actgcagaaa gaccattcct tgcaagcaat attgcttggg ggtgcagaca 120
 aggtgtccat tcatattgcc cgacaatgac gaagtcattt acggaggcct ctccagcttc 180
 atctgcacag gcgaagggtga agtttacctt tgaatgccta agaagaaatg actattggct 240
 ctacgaaaacc ttctaacca atgatgaacc cgaatgctgt gacatcagga gcgaggagca 300
 aaccgcaccc agacccaaag gaaccgtgga cagaagagac tctgttccca ggacatcgct 360
 cacagtgtcc tcggccacta gactgtgccc cggccggctg aagctgtgtg tactcgtcct 420
 cattctcttc cacacagtgc tcacggcctc cgcagcgcag aactccacgg gactgggcct 480
 ggggtggcctc cccacgctcg ag 502

<210> 358

<211> 411

<212> DNA

<213> Mus musculus

<400> 358

gaattcggcc aaagaggcct agtttattat tattatTTTT cgctgctaag aagctaagat 60
 cgttcacccc cattcacatt aacagtacct agctgtaatg tttcacgggtg tgctgctatt 120
 ttagaaacat tgttataata tattatTTTA ctgcttaaat ttcaagtccc gaggtagatg 180
 gtcgagagac gagtttctctg tactggaaaa gccttttctct ctgtccctgt ccttctggta 240
 gcatcgatgg gctgcgttgc gtttggttcc gtttggttcc ttttcttccg tgcctcttca 300
 ttaccaggtt ttctttcttc ctctgaccac attcttcaaa gagagtattc tttacctcag 360
 gtttactgga caaaaacaaa acaaaacaaa accaatagtg ataacctcga g 411

<210> 359

<211> 427

<212> DNA

<213> Mus musculus

<400> 359

gaattcggcc aaagaggcct aagacctgcc tcgagtttct tgagctgaca ccatgaaggc 60
 cctcccagcc ctgccactga tgctgatgct gctctccatg cctccccct gcgccccgca 120
 agcctctggg atccggggag atgctctgga gaagtcctgt ctccagcaac ccttgactg 180
 tgatgatatc tacgcccagg gctatcagga agacggcgtg tatctcatct acccctatgg 240
 cccagtggtg ccggtgcccg tcttctgcca catgacaact gagggcggca agtggacggt 300

```

ttttcagaaa agattcaacg gctcagtgag tttcttccgg ggctggagcg actacaagct 360
gggctttggc cgtgctgacg gggagtgactg gctggggctg cagaacctgc acctactgac 420
actcgag                                         427

```

<210> 360
 <211> 580
 <212> DNA
 <213> Homo sapiens

```

<400> 360
gtccccctett ctcggtttcc tcccccatcc ccttgactct cccctcccag ccctcgctct 60
ctcgtctgcc ctcagcgcg gccccgccat gacggaggcg ggtgccggtg ccgttgccgc 120
cgctgccgtc gcaggggggg agtcgggttc ccagaaagta gcttgatgag tgtccaaagt 180
agcagtgga gtttggagg gcccgcattc tgggtcccagc tctccacgtc tccaacccc 240
ggctcggcgg cggcgccag gtccctgctg aatcacacgc cgccatccgg gaggcccagg 300
gaagggtgcaa tggatgagct tcatagtctg gatccaagaa ggcaagagtt attggaagct 360
agatttactg gaggttgcaag tgggagcact ggaagtacgg gcagttgcag tgttgagct 420
aaagcctcaa caaataacga aagctctaat cacagttttg gaagcttggg atctttaagt 480
gacaaagaat cagagacacc ggagaagaaa caatcggaat catccagggg aagaaagaga 540
aaagcagaaa accagaatga aagtagtcag ggcactcgag 580

```

<210> 361
 <211> 294
 <212> DNA
 <213> Homo sapiens

```

<400> 361
gaattcggcc ttcattggcct agacagacca aggtaaaattg tttttgataa ttacagaagt 60
gtgatttctt aatcagcagc tgtcaaacat agtggttcctt aattttaaag cttgaacact 120
aaattataaa ttggagagg tgggaataat acgggtcatat ctctagaaac acaagtcttt 180
agtagcaaaa aagaaattag caagagaaga aaactgttca gtactttgaa aggaaaaagt 240
tttcagtgat agttttttta gatgaaaatt aacatgataa agaagggact cgag 294

```

<210> 362
 <211> 174
 <212> DNA
 <213> Homo sapiens

```

<400> 362
gcgattgaat tctagacctg cctcgagaca ggtgccatta taggaacagc ccctctttgt 60
aatcttcacc ccagcctcac tccagtcatg ctgccctggt ggactgggat gacctttctc 120
cccattacca ctctgtggac cttgctctgt acgatggcta agcccaaact cgag 174

```

<210> 363
 <211> 558
 <212> DNA
 <213> Homo sapiens

```

<400> 363
gaattcggcc aaagaggcct agtctctggt agcttttcca gctctttcct tgccgcttat 60
caaccttttc ccaggagtct gctctgctc ttttgctggc ttctcgtttt ctctctcact 120
ctccacgttg gattccaggc ccaagtggct atctgggctg tcgctctcct ctgtgtctc 180
ccgcctgaa ctgtcacctt ctctctcgtt gctctcaggg tcaactggctt ccttgctttg 240
ctcttctctg acatcttctc cgacattcat ctttccatct ttgtaggaaa gcaaacgcct 300
gtcatcttta tctagcacga agccatcatt cagatcatct gctgacatat gttttgggtt 360
cttaacattt tcatctctat cctttccaag cattcttctga agtctctcag cctccagctt 420
ctgagggtgc tcctgctctt cctttgccaa ttctgcctcc gtcttcatcc tgtagaggg 480
ctgcgccttc atttcaaagc caagctcgcg aaccatcatg tcatatgcat cgggcttggg 540
tttttctctt ttgtctct 558

```


<210> 364
 <211> 233
 <212> DNA
 <213> Homo sapiens

<400> 364
 gaattcggcc aaagaggcct aatgatggag ggaatctgat aaagacatct tataaattca 60
 acagacacaa aagaatttga tctcccataa gcaactgtga aattacaata acagatcctg 120
 ggaagttcta caattctaata tcagtttttt caagggggaa catgggcaaag gtgttcagtt 180
 tcatccttgt taccaccgct ctgataatgg gcagggaaat ttcggcgctc gag 233

<210> 365
 <211> 276
 <212> DNA
 <213> Homo sapiens

<400> 365
 gctagagggt gaagctggcg gagcaggagg atgggcggtg atagactaga gaacaagacc 60
 tctgtctccg tagcatcctg gagcagtctg aatgccagaa tggataaccg ttttgctaca 120
 gcatttgtaa ttgcttgtgt gcttagcctc atttccacca tctacatggc agcctccatt 180
 ggcacagact tctggatatga atatcgaagt ccagttcaag aaaattccag tgatttgaat 240
 aaaagcatct gggatgaatt cacaagtgca ctcgag 276

<210> 366
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 366
 gaattcggcc aaagaggcct aatccagtca gactctggca acttttaggt ggtactttct 60
 attttaacac ctcaagggtg aagcagaaga ataaggagaa ggataagtcg aaggggaagg 120
 cgcttgaaga ggacgaagag gagaggagac gccgtgagcg ggacgaccag atgtaccgag 180
 agcggctgcy caccttgctg gtcacgcgcy ttgtcatgag cctcctgaat gctctcagca 240
 ccagcggagg cagcatttcc tggaaacgact ttgtccacga gatgctggcc aagggcgagg 300
 tgcagcgcgt ccaggtgggt cctgatgaac tcgag 335

<210> 367
 <211> 281
 <212> DNA
 <213> Homo sapiens

<400> 367
 gcgggataat gtgtttcagc gatgaaccac ccatggcctt actacagaca tatttccact 60
 ttgaaaatgt gtgtgagtgat acatgtctgt gtgtgaggca gagattagaa agtgtaagtg 120
 ttgtgcgtttt cattttacac atcttacatt ttcccttaat ttgtttgaaa gcctgttttg 180
 ttgtgtggctt ccattcctgg aagtcctatg agttgttagt ggtgaagatg gaacagatgt 240
 gtccaaccgg ggggactcct gccctcaggg acacactcga g 281

<210> 368
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 368
 gaattcggcc ttcattggcct aggctactgt cctctctgat caacctggat tgcaggtccc 60
 aaggcacttt ttgtttttat ggcattatcc tttgcccgtg atgaaatcat ctggctactt 120
 cgtcatgcag ataacatgcc aaagaagagt gcagacgact ttatagataa gcacattgct 180
 gaattaatat ttacatgga agaacttaga gcacatgtga ggaaatacgg acctgtaatg 240
 cagaggtatt acgtgcagta cctttctggc tttgatgctg ttgtccccaa tgaactcgag 300

<210> 369
 <211> 484
 <212> DNA
 <213> Homo sapiens

<400> 369
 gcgaagggtga tccagacgca agatggctgt cctctctaag gaatatggtt ttgtgcttct 60
 aactgggtgct gccagcttta taatgggtggc ccacctagcc atcaatgttt ccaaggcccc 120
 caagaagtac aaagtggagt atcctatcat gtacagcagc gacctgaaa atgggcacat 180
 cttcaactgc attcagcgag cccaccagaa cacgttggaa gtgtatcctc ccttcttatt 240
 tttctagct gttggagggtg tttaccaccc gcgtatagct tctggcctgg gcttggcctg 300
 gattgttggg cgagttcttt atgcttatgg ctattacagc ggagaacca gcaagcgtag 360
 tcgaggagcc ctgggggtcca tcgccctcct gggcttgggtg ggcacaactg tgtgctctgc 420
 tttccagcat cttgggtggg ttaaaagtgg ctggggcagt ggacccaaat gctgccaact 480
 cgag 484

<210> 370
 <211> 316
 <212> DNA
 <213> Homo sapiens

<400> 370
 gaattcggcc ttcattggcct acaaccccat catcacccag ttcttcccca ccctgctgct 60
 gtgggtgcttc tcggccctcc tccccaccat cgtctactac tcagccttct ttgaagccca 120
 ctggacacgc tctggggaga acaggacaac catgcacaag tgctacactt tcctcatctt 180
 catggtgctg ctctaccct cgctgggact gagcagcctg gacctcttct tccgctggct 240
 ctttgataag aaattcttgg ctgaggcagc tattcggttt gagtgtgtgt tcctgcccga 300
 caacagcgcc ctcgag 316

<210> 371
 <211> 255
 <212> DNA
 <213> Gallus sp.

<400> 371
 gaattcggcc aaagaggcct acaaagaaaa gaaagaaagg gaaagaagag gaaaaacatt 60
 tataaatgcc attgtctaatt gtcttttcaa tttaaacgta acatgattat ctacatatat 120
 ctacaaatat ctacaattat ctacactggt tgcagatacg attctttggt tatcttctact 180
 tttcccttat gttgcaacta tcaagaaaaa aatgtttgta taccctttga aagaaataat 240
 aaatataacc tcgag 255

<210> 372
 <211> 253
 <212> DNA
 <213> Gallus sp.

<400> 372
 gaattcggcc aaagaggcct aggtgggtga aagaacagggt tgcaattgaa ttctggtttt 60
 cagagctgga ataagatagt tttttccccc cacgttgac gttttccccc ccccatggtt 120
 gcacgctatg gggtttttggc tggatcagc attactccac caaggggctg tttgctgtct 180
 ggggtacttc caggtgataa gaatgttagg gcaggaccaa aatatgtcaa cagtgatact 240
 ggaaacactc gag 253

<210> 373
 <211> 287
 <212> DNA
 <213> Gallus sp.

<400> 373
 gaattcggcc aaagaggcct aggacattgc tccgtgagaa aatgaagact ctgcaagctg 60

```

cttttttccct ggttgcgctt gtacctttgg tgaagccagc accacctata cagcaagatt 120
caccacaagtt ttatgagtat gttgatgcag attttgccac gggagagcctg atccaacagg 180
attatgaaat gctgcccag gatacaataa aggatggaac aaatgtttct cttgacactg 240
ccctgagact gcaagcagat gacagcgaac tgagtgccag actcgag 287

```

<210> 374
 <211> 427
 <212> DNA
 <213> Gallus sp.

```

<400> 374
gaattcggcc aaagaggcct aaagcgacag aggactagag atgaagatct ttttattatt 60
caccttttcc acgtttttct tgtctgcttt tgaacaagca gccgcactcg ctactatga 120
caagatttta actcatagtc gaataagggc acgcgaccaa ggcccaaatg tctgtgccct 180
tcagcaagtt atgggaacca aaaagaaata cttcagcacc tgcagaaact ggtaccaggg 240
atccatctgt ggaaagaaag caactgtctt atatgagtgc tgtcctggct acatgaagat 300
ggatgggtatg agaggatgtc ctgcagtgc tcctattgat catgtatatg gcactcttgg 360
tattgtggga gctacctcca ctcagcagta ttctgacatg tcaaagctga gagaagagat 420
actcgag 427

```

<210> 375
 <211> 204
 <212> DNA
 <213> Gallus sp.

<220>
 <221> unsure
 <222> (74)

<220>
 <221> unsure
 <222> (76)

<220>
 <221> unsure
 <222> (115)..(116)

```

<400> 375
gaattcggcc aaagaggcct agtttttggc tttttttttt tctttttctt ataaataatg 60
aagacaccga catntncttt gtgtgtgtgt gtgtgtgtgt gtgtctcacc gtgtnnacaa 120
agccttatct cagaactggg catctcccag ttctccctgc tccttctga gcctcatttg 180
agttaccaac ccccaccact cgag 204

```

<210> 376
 <211> 279
 <212> DNA
 <213> Gallus sp.

<220>
 <221> unsure
 <222> (41)

```

<400> 376
gaattcggcc aaagaggcct aatgacagac tttttttttt nctgggtgtg tttaaagtcg 60
atttccccc cctccccct ccatgtgtta attttgcgag tccttttatg cgcgcgcccc 120
tttccccatt ggcacacgcc aaatttgggt ccttacagct cgcgacaaaag gagatgcac 180
tattttaaga tgcccttttg tttctgttgc gttctgttgc ttctttctgg tgttgtttt 240
ggttgttttc ccccttcgg agcagcaggt agtctcgag 279

```

<210> 377

<211> 375

<212> DNA

<213> Gallus sp.

<400> 377

```

gaattcgcca aagaggccta aactctcatg gtttcacagc tgcagacaag ttgccgtgca 60
tcttggtgga ctatcggagt ttgcatcctg gcggccgcgc tctttccagg gctgcaagct 120
cagactgtct tagtcaatga cacagtctcg gggtagattg ggacagacgt cgtcctgcac 180
tgcagcttca ccaacccgct ccccaatgtg aagatcacgc aggtcacgtg gcagaaggtc 240
accaacggca ccaagcagaa tgtggccatc tacaaccccg ccatgggggt ctccatcctc 300
ccaccctaca aagaacgggt gactttccgg aacccttcct tcaaagatgg caccattcag 360
ctctctcggc tcgag 375

```

<210> 378

<211> 396

<212> DNA

<213> Gallus sp.

<400> 378

```

gaattcggcc aaagaggcct aaaaagctgc agtgactgta agatcatgca aaagctagca 60
gtctatgttt atatttacct gttcatgcag atcgcgggtg atccgggtggc tctggatggc 120
agtagtcagc ccacagagaa cgctgaaaaa gacggactgt gcaatgcttg tacgtggaga 180
cagaatacaa aatcctccag aatagaagcc ataaaaattc aaatcctcag caaactgcgc 240
ctggaacaag cacctaaccat tagcagggac gttattaagc agcttttacc caaagctcct 300
ccactgcagg aactgattga tcagtatgat gtccagaggg acgacagtag cgatggctct 360
ttggaagacg atgactatca taccacaaca ctcgag 396

```

<210> 379

<211> 293

<212> DNA

<213> Gallus sp.

<400> 379

```

gaattcggcc aaagaggcct acgtcgattg aattctagac ctgcctcgag agaagagtga 60
aaatgatgac aagacttcct gcgctgcata cctgtggat ccttctcttt tcatatctga 120
caatggaagt tatggctaca gaacacatac aggaatttgc atgctttact gactatgccg 180
aaaagctggt ttgtcactgg aaggtgcctg aacagctgaa ctgctccaaa gacttcctgc 240
tctactacag gaaggaactt tttctcccca gaaatgtgtg tggcccccctc gag 293

```

<210> 380

<211> 297

<212> DNA

<213> Gallus sp.

<400> 380

```

gaattcggcc aaagaggcct agtcattgtc tactactctc tgatgtcggg cgtcatctgg 60
tttgtcatgc tgacctacgc ctggcacacg tcttcaagg cgctgggcac cacctaccag 120
ccgtgctggt gcaagacctc ctacttcac ctcatcacct ggtccatccc tttcgtactc 180
accgtggcca tcctggctgt ggcacaggtg gatgggtgact ccgtcagcgg tatctgcttc 240
gtgggttaca agaactatcg ctaccgtgcc ggctttgtcc tggcaccacg actcgag 297

```

<210> 381

<211> 272

<212> DNA

<213> Gallus sp.

<400> 381

```

gaattcggcc aaagaggcct atttgggaac aaattgaagc tctaccaact ctgactcagg 60
ctcagaagaa gatgaagaag cttattctgc tttctcatt gttcttggct ccagattctt 120
cttataaaga aaatcagaaa ataaaccaa acttttcttc aaacaatacc agtcataaac 180

```

gacttaagag agactggata tggaaccgaa tgcatatcag agaagagatt gattcaccat 240
taccacatca cgttggcaag ctacgctcg ag 272

<210> 382
<211> 641
<212> DNA
<213> Gallus sp.

<400> 382
gaattcggcc aaagaggcct actgtaacat ataaaagctg ttagcagttc ctgtggccag 60
aaagcttcac aaccagcaga gttttgttct ttgggagttt gtaataagag acactccttc 120
acaaagggtc atatcatcac ataggagagt gttatatata ctgggagAAC aatagactgt 180
attcattgtg gtattatcca aagatctgtt ttctactgcc ctgacttaaa gcagagtacc 240
tctgtggcct atctttcccc ttggcccca agatgacaat aatagctgca atcagttgtg 300
ttttcttatt ttccattctc tgtgaaacaa gtgcattagt gttacccaac tccactgacc 360
tactcctgtc aaacaataat ttactgaca ttgagacggc ttggcagct catctggact 420
cagcaaaaaat tcccaagcc aggcggaagc gctacatttc acagaatgac atgattgcca 480
ttcttgatta tcataatcaa gtcagaggca aagtcttccc acctgcttcc aacatggaat 540
atatggtttg ggatgaaact ctgccaat ctgcagaggc ttgggctgct acatgcattt 600
gggaccatgg accttcctac ttactgagat tcttgggcg g 641

<210> 383
<211> 706
<212> DNA
<213> Homo sapiens

<400> 383
ctcgagttgt tccgtgcatt ctgtaagaag ctagataaca caggcagtaa ggatctgaca 60
ggcaaagggtg atagcattgg gaatgatcat taagagcttg tcattctaaa aatctgaaaa 120
aaaaaataat tgaatttgag aaaatagaaa gctgaattac taatgatgct gatctttgat 180
tacagactat ttgggatatt agattgtcct acctaatctc acaacagtag tccaatccag 240
ctgtaaatctt cctatctcca caaatttaac atggcagctg acatataatta atatatctta 300
gcatcagagt atcttctaa aattgttcaa cttaaaaaac cactttcaaa ttgtttgctt 360
tatgtttatac aactgttgta atacttcata ctgataaacc gctttaaaat aagtaagtag 420
ttaaccttca aaccaagaac tgacaggtat tattacctcc attttgcaga tggaaaaaca 480
ggatgaaaga ttaaaatctt tgtccaagac cataaaagcc agctgtggat ccctgggtga 540
atcttgaggt tgctaacttc tgtattttgc ttagtttatt gaytaacaat accttaattt 600
aaaaaaaata ttttcagcca aagagggtgag ggaatagata tgtgcgcttg caaggaagtc 660
tgcaagggtaa ctccatatca catcataggc ctctttggcc gaattc 706

<210> 384
<211> 481
<212> DNA
<213> Homo sapiens

<400> 384
gttgacgggc tggaggagga agaagagggtg gatccccgga tccagggaga actggagaag 60
ttaaatcagt ccacggatga tatcaacaga cgggagactg aacttgagga tgctcgtcag 120
aagttccgct ctgttctggt tgaagcaacg gtgaaactgg atgaactggt gaagaaaatt 180
ggcaaagctg tggaagactc caaccctac tgggatgcac ggaggggtggc gaggcaggct 240
cagctggaag ctcaaaaagc cagcaggac ctccagaggg ccacagaggt gctccgcgcc 300
gccaaggaga ccatctccct ggccgagcag cggctgctgg aggatgacaa gcggcagttc 360
gactccgctt ggcaggagat gctgaatctc gccactcaga gggatcatgga ggccgagcag 420
accaagacca ggagcgagct ggtgcataag gaggtcgacg gcctctttgg ccctcgagac 480
a 481

<210> 385
<211> 589
<212> DNA
<213> Homo sapiens

<400> 385

```

gaattcggcc ttcattggcct aaggtagagt ctttcaatac attttgggat aatggctatg 60
catggagtgt cagttccctg gatgggtttt aacatgctta tattacaagc agaaattgta 120
gtgtttgcac tgtcaacaga cattaggaca gaggatttat caacagaact cacaaagga 180
tgttctttaa ttgctccga tatagcagt ctgcaaacag atacaggac agaatttcta 240
ttaaaaagca tgggcacact gctattttca gaagaggtag atgaacaat tttctcagat 300
aaatgtgaca caggatggtt ttcattcagaa ctatgcacag ataagtcagt ggcagtttct 360
ggaagtctac ttgggttaag agactgctgt agtacagtgg tggctctccg gagggtggca 420
gacttggtgc taggagatct acagtctgga ttgacaataa tgacaccagt cgaaccttcc 480
atttttgttt caggggtaga agagacttct aagtttgag gcccttctt cgagctgagc 540
ggaggaggca accgggtctc tttagaggtc tggaagagat gggctcgag 589

```

<210> 386

<211> 305

<212> DNA

<213> Homo sapiens

<400> 386

```

gaattcggcc aaagaggcct atcagacttc aaccacagtt gtgattgttt ttagtttgtt 60
agctgcctgg agtgttattt taagaaagca gaagcaccat catttgaca ctccctatag 120
atcacacacc ttaacctga ctttttttgc tccagttttt cagaagaagt gaagtcaaga 180
tgaagaacca tttgcttttc tggggagtc tggcggtttt tattaaggct gttcatgtga 240
aagccaaga agatgaaagg attgttcttg ttgacaacaa atgtaagtgt gcccgattc 300
tcgag 305

```

<210> 387

<211> 197

<212> DNA

<213> Homo sapiens

<400> 387

```

gaattcggcc ttcattggcct actgcctcag atttcgtgca gttgggtgtc gtttgcctga 60
ggattccatt cctgcttgc cagatgtgtc gacacaaaat tatccgcttt ctggctcagg 120
ttttgggtaag ctggccttgg gtccacgtca gccttgacag cccggcgga gctgtcaaaa 180
aggccctgc tctcgag 197

```

<210> 388

<211> 346

<212> DNA

<213> Homo sapiens

<400> 388

```

gaattcggcc ttcattggcct caagtgaata tagtcagtcc ccaaagatgg agagcttgag 60
ttctcacaga attgatgaag atggagaaaa cacacagatt gaggatacgg aacctatgtc 120
tccagtcttc aattctaaat ttgttctgc tgaatatgat agtatcctga tgaatccagc 180
acaggatggt gaagtacaac tgagtcagaa tgatgacaaa acaaaggag atgatacaga 240
caccagggat gacattagta ttttagccac tgggtgcaag ggcagagaag aaacggtagc 300
agaagatgtt tgtattgac tcacttgtga ttcgtggagt ctcgag 346

```

<210> 389

<211> 502

<212> DNA

<213> Mus musculus

<400> 389

```

gaattcggcc aaagaggcct agttccggat atctgtggtg acattttcta tctgcttcag 60
cagcatgttg cagctactac taccaacagc tctggtactt acagctttct ctggcattca 120
agctgggtct caaaaggctg tgggtgaacct agaccccaag tgggtcaggg tgccttagga 180
agacagcgtg accctcagat gccaaaggac tttctcccc gagggacaatt ctatcaagt 240
gttccataac gaaagcctca tcccacacca ggatgccaac tatgtcatcc aaagtgccag 300

```

```

agttaaggac agtggaatgt acaggtgccac gacagccctc tccacgatca gtgacccagt 360
gcaactagag gtccatattg gctggctatt gcttcagacc actaagtggc tgttccagga 420
gggggacccc attcatctga gatgccacag ttggcaaaac agacctgtac ggaagggtcac 480
ctatttacag caacggctcg ag                                     502

```

<210> 390..

<211> 455

<212> DNA

<213> Mus musculus

<400> 390

```

gaattcggcc aaagaggcct aaagaaagtg aaaaaaatct tttgatgagc acattgtaca 60
aacttcattg tctgattggc cagattgcag gagaccatga atgtggcagt tctagtcaaa 120
ggatgctttc tgtccaagaa gcagctgcat atttaaaaaa tttaggtcct gagtatgaag 180
atgtatttaa tacttcattg ctgtggattt ttaaaaatgg gaaagatgtt ggaataaggt 240
gtgttgggta cgggcctgag gaagacttga caaacataac tgatgtgcag tttttacagt 300
ccaccaggcc ccagatgccc ttctgggtgc gtttccggcg tgccttcatt actgtgaccc 360
ataggttatt gttgttatgt ttagggttag tgcgtgtgtg cgttgctctc cggtacatga 420
gataccgctg gactaaggag gaaacgggac tcgag                                     455

```

<210> 391

<211> 600

<212> DNA

<213> Mus musculus

<400> 391

```

gaattcggga aagaggccta cacgatgccc ctatcagatg tgttgaatac tgtccagaag 60
tgaacgtgat ggttaactgga agttgggata agacagttaa gctgtggggac cccagaactc 120
cgtgtaatgc tgggactttc tcccagccgg aaaagggtcta caccctgtca gtgtctgggg 180
acaggctgat tgtgggcacg gcggggccgc gagtgctggt tggggacttg cggaacatgg 240
gctatgtgca gcagcggagg gactccagcc tgaagtacca gactcgtctc atccgagcct 300
tcccgaacaa gcagggttat gtgttgagct ccacgaagg cagagtggtt gtggaatact 360
tggacccgag ccctgagggt cagaagaaga agtacgcctt caagtgccac aggcataaag 420
agaacaacat tgagcagatt taccagatca acgcatctc ctttcacaac atccacaaca 480
cgtttgccac aggtgggttc gatggattcg tcaatatttg ggaccattt aacaagaagc 540
gcctgtgcca gttccatcgg taccacacca gcacgcttc ccttgccctc agtaatgacg 600

```

<210> 392

<211> 976

<212> DNA

<213> Mus musculus

<400> 392

```

gaattcgcgg ccgcgtcgac gcctcccaag tgctgggatt aaataaacct ttttaaaaag 60
aggcacttta gaacacttgg aagaaccttt cagtgcgtgtt actgaaatcc aaagcgtagc 120
ctataagtag agcagatagg acatagggtt tacacagttt attgagggtat taaatttact 180
ttgcagtgga tattttttaa tatatacttg agctgacgtg tttttaactg agtttttttg 240
tttttttttt ttaatgctac tcatttggat tgctctttta ataaactctt cttgtatagg 300
aatgaaatca ccaggagaac agctgggtgt cctgccacca gtggaggcct ttcctaata 360
tccccgggtc atcaatagag aaagaagctg tgattaccag ttcccatcct ctccgtctac 420
agacactcta aaaggcata ccgaggagga cactgtaaca gcaggtcagg cgatggcagt 480
ggaagagcag tgtgtgccag cagcagagct tcctagagtg agcgagatta cagaaaatac 540
agtgttagga gaggttccatc ttttctctag gaaggtagaa gagattttga aggagaagaa 600
tgtttcataat gttagtgcac ttccacacc tatcttttca gcacaagaga agatgaatcg 660
cctttctgag ttcatacatt ctaatacttc taaagctggt gttgaggaat ttgtatagtg 720
tttgcataga aaactaaata ctgttggtat tacagcatca gctaagggtg tgagtttgcc 780
gccagcagtt agcgctaata attcccatgc tgcagcagca ttggcttctc tgggaaggcg 840
tgttgtgtca atttctctaa gtgacttcag tgctaagaa ctttttgagc cgctctgttc 900
tgaacattta aaagataaca actcctaata acagtattcc tcttcagtgg aagtagaaat 960
gaatcgcgtc cctata                                     976

```

<210> 393
 <211> 436
 <212> DNA
 <213> Mus musculus

<400> 393
 gaattcggcc aaagaggcct agttcctcat cactgttcct gtgctcacag tcatcaatta 60
 tagacccac aacatgcgcc ctgaagacag aatgttccat atcagagctg tgatcttgag 120
 agccctctcc ttggctttcc tgctgagtct ccgaggagct ggggccatca aggcggacca 180
 tgtgtcaact tatgcgcgt ttgtacagac gcatagacca acaggggagt ttatgtttga 240
 atttgatgaa gatgagatgt tctatgtgga tctggacaag aaggagaccg tctggcatct 300
 ggaggagttt ggccaagcct tttcctttga ggctcagggc gggctggcta acattgctat 360
 attgaacaac aacttgaata ccttgatcca gcgttccaac cacactcagg ccaccaacga 420
 tcccccatca ctcgag 436

<210> 394
 <211> 159
 <212> DNA
 <213> Mus musculus

<400> 394
 gaattcgcgg ccgcgtcgac ggcccaacca cctctaata gttctatttt atacatgctt 60
 tcccatatta catttccaaa tttactaaa tattttaact taatttttac actccagtca 120
 cagatggaat taagaaacac cattccttcc caactcgag 159

<210> 395
 <211> 532
 <212> DNA
 <213> Mus musculus

<400> 395
 gaattcgcgg ccgcgtcgac ttgagcttgt gaggttagcc acagtttaca gagggttgaa 60
 agtctaggtta ggcttactta actgtcagcc ctctcacctt ttctgaagga cattttctgg 120
 agccttcttt gaattattcat caatgtctga agaaattgtt tatgcaaatc tcaaaatcca 180
 ggacctgat aaaaaagaag aaaccagaa gtctgacaaa tgtgggggaa aagtatccgc 240
 cgatgcttcc cattcacagc aaaaaacagt cttgattctg attcttctat gccttctgct 300
 gttcattgga atgggggtct taggaggcat cttttataca actttggcaa cagaaatgat 360
 aaaatcgaat caattgcaaa ggccaagga agaacttcag gaaaatgttt ccctacagct 420
 gaagcacaat ctcaacagct ccaagaaaat caagaacctt tctgccatgc tgcaaagcac 480
 agccaccag ctgtgccgag agctgtatat caaagaacca gagcacccta ta 532

<210> 396
 <211> 725
 <212> DNA
 <213> Mus musculus

<400> 396
 gaattcgcgg ccgcgtcgac cctctccaaa gtccttgaac atagactcta accatggaat 60
 ggacctgggt cttctctctc ctctgtcag taactgcagg tgtccactcc cagggttcagc 120
 tgcagcagtc tggagctgag ctgatgaagc ctggggcctc agtgaagctt tcctgcaagg 180
 ctactggcta cacattcact ggctactgga tagagtgggt aaagcagagg cctggacatg 240
 gccttgagtg gattggagag attttacctg gaagtggtag tactaactac aatgagaagt 300
 tcaagggcaa ggccacattc actgcagata cctctccaa cacagcctac atgcaactca 360
 gcagcctgac aactgaggac tctgccatct attactgtgc agccttatcc ttgtactact 420
 gggggccaagg caccactctc acagtctcct cagccaaaac aacagcccca tcgggtctatc 480
 cactggcccc tgtgtgtgga ggtacaactg gctcctcgtt gactctagga tgccctggta 540
 aggggttatt ccctgagcca gtgaccttga cctggaactc tggatccctg tccagtgggtg 600
 tgcacacctt cccagctctc ctgcagctcg gctctacac cctcagcagc tcagtgactg 660
 taacctcgaa cacctggccc agccagacca tcacctgcaa tgtggcccac ccggctctcc 720
 ctata 725

<210> 397
 <211> 276
 <212> DNA
 <213> Mus musculus

<400> 397
 gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctatttttatt ttttaactctc 60
 ttctcctcag acacagtggc actgcttatc tccaaatggt gtgatcgtct cctcagttag 120
 cggcggctcc cactgcgctg tgggtagtggt gtgactgtgg ctgtactgta tagtgaacat 180
 agttggcata tctttgtttg aagtttggtg gtgattccac caaactgggtg taaaaaaca 240
 aaacaaaaaa acccacaac cacccaaaaa ctcgag 276

<210> 398
 <211> 404
 <212> DNA
 <213> Mus musculus

<400> 398
 gaattcggcc aaagaggcct atgcttagcc aaaacgctga tcctgaccta cccagctcct 60
 tcattttaca gaagaagaaa atgaggctta gtggatgtct tctcactatt agtgcacttg 120
 gagcttttat ttatttcttt gagatagtat ctgcctattt agaccaggct gaccacagaa 180
 tagaaggcac tcttccagcc ttagcctccg tgccctggagg agctgccata cccagcacct 240
 taatttatgt catttattct agggaaaccc aaaactttct tgacagagta gaggagccag 300
 atgaactaag gcagcaaat acatgggaact tgatttctct gtatgttggg aggactccaa 360
 gcagttagct cttcatggct agaccccgag cccaaaacct cgag 404

<210> 399
 <211> 592
 <212> DNA
 <213> Mus musculus

<400> 399
 gaattcggcc aaagaggcct acatgaatct acttctgac cttacctttg ttgcagctgc 60
 tgttgctgcc ccttttgatg atgatgacaa gatcgttggg ggctacatct gtgaggagaa 120
 ttctgtcccc taccagggtgt ccttgaattc tggctaccac ttctgcggtg gctccctcat 180
 cagcgaacag tgggtgggtgt cagcagggtca ctgctacaag tcccgcatcc aggtgagact 240
 gggagagcac aacatcgaag tcctggaggg gaatgaacag ttcatcaatg cagccaagat 300
 catccgccac cccaaataca acagccggac tctggacaat gacatcctgc tgatcaagct 360
 ctctcactct gccgtcatca attcccgctg gtccgccatc tctctgccc ctgcccctcc 420
 agctgctggc accgagtcct tcactccgc tggggcaaca ctctgagttc tggtgccgac 480
 taccagacg agctgcagtg cctggatgct cctgtgctga gccaggctga gtgtgaagcc 540
 tcctaccctg gaaagattac caacaacatg ttctgtgtgg gctttctctg ag 592

<210> 400
 <211> 435
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (332)

<400> 400
 gaattcggcc aaagaggcct agacggaact gccacgatgc tgccactttg gactctttca 60
 ctgctgctgg gagcagtagc aggaaaagaa gtttgctacg aaagactcgg ctgcttcagt 120
 gatgactccc catggtcagg aattacggaa agaccctcc atatatgtcc ttggtctcca 180
 aaagatgtca acaccgctt cctctatat actaatgaga acccaacaa ctttcaagaa 240
 gttgcccag attcatcaag catcagtggc tccaatttca aaacaaatag aaaaactcgc 300
 tttattattc atggattcat agacaagga gnagaaaact ggctggccaa tgtgtgcaag 360
 aatctgttca aggtggaaag tgtgaactgt atctgtgtgg actggaaagg tggctcccga 420

actggataca tcgag

435

<210> 401

<211> 581

<212> DNA

<213> Mus musculus

<400> 401

```

gaattcgcgg ccgcgtcgac gttagtccac tcatgaacat ggccctgaaa taggagctac 60
atgttgcaag aaccatccta tgacaaggga attcagtgcc ctcaacaatt aacactatgt 120
cagtaaataa ctgttgttca taaaacagct tcaactgttc caataaggac acagcatatt 180
cggattgat ctgcctttcc tcttgagtgg acatgattgt attccattaa tatctccaag 240
aacagattag aaaagtcctt cttgatggaa ggtcaaatga atacttcaaa agcaaaggag 300
ggagttcact tgctgttata tgcagcattc agaacagaac ccacacagcc gctctgaata 360
tcttgttaca ggctcacaat ctttgctagg tcatcctgag ctacagtttt tcaacagatt 420
ctccaaacat cctgctcaaa tttgcacctg ggaagctcat gaatagggaa aatacaggag 480
gtagattttg ttgcaacatc ttatgttcag taggtcttct gcagaactcg tccccggtcg 540
cccagctcac cgcgcgcgtc cgcgcgcgcg ttctccctat a 581

```

<210> 402

<211> 751

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (402)

<220>

<221> unsure

<222> (416)

<220>

<221> unsure

<222> (537)

<400> 402

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gaattttaat taagaattcg cggccgcgtc gacgaatctg tttgctagtt ggagaaaaag 60
atagggcttg tatatcacat ttcattttca agagtgtaat ctttaagtat ttcacatgca 120
tgtttttagca ctggctagtc aacaatagat agcattcggc tgaatgagga cttttaaagt 180
aaaagctttt gaaagtttta aattttgtaag tgtacttgaa tacaatttat cagtacatca 240
gatgtttttc caagttggta agttaccag cctctggagg aaggctcctg agacaaggaa 300
taaatacgtct tttcctttat aatggaacgt gagacctacc ctgcagggtt gtttagtaag 360
ctagccaaag tattggggat tgcagtttcc gtttgttggt tnattgtcca aacatngttc 420
tgtgaaagaa atgtaaaaaa atctttcctt gaaactgagt atgatagctc atacccttaa 480
tcctagcact ctgggaaggc aggagtgggt cgataaacct ctccttttaa gaaaagnaca 540
gctacagaag tctcagaaga ggccagagca gtgtctatac ctatcaccct tcaactcagag 600
cttgccgaag cacaattttc ataattccct ctaatcttta tcgttccagc gggagtctct 660
tgtctggctt catctttata gcatcccagg aaagggaaca ttaaacataa atgtgtgtga 720
agtgatagtt tggttctccc agcgcgcgca g 751

```

<210> 403

<211> 114

<212> DNA

<213> Mus musculus

<400> 403

```

gaattcgcgg ccgcgtcgac attgaattct atacctgcct ctagcacaca tggttaagac 60
tctagcctgc ttaccattt acaattttgt aagtaacag ctccctatag cgag 114

```

<210> 404
 <211> 570
 <212> DNA
 <213> Mus musculus

<400> 404
 gaattcgcgg ccgcgtcgac gggtcaggta tggatcaac acaacaaga tggagaaca 60
 gataaggcct gacttctggc cgtgcccagt ctgggccact gttggcacat agccgactgt 120
 gtccatagga agctgaaaag cgtgttcctt tgcaatggac aggcaacacc tggttttcta 180
 cactgaacc ctaccaagaa gctcaaggtc aagctgtggc ggggtggcctc ggctgtgccc 240
 catccccgcc cacaccctg ccccttgccc agctctctgt gacagtcatg ccagtaaagg 300
 ctcatacctt tttctgagtg cccaggctaa gaatgcatac cagtctgcca aaccttcac 360
 ccaaatagtg agaaatcgtc tttccacaag agactttagg gtcctaagag ttacagaaag 420
 cctgactcag gcagaggaag cagcctactc cactgctcta ggaaaaaatt gcaaccctc 480
 ccaacagccc ctgctcaaag cttttatcgc caaagcaca gtaagttctc agacacagcc 540
 tgcgtcgacg cggccgcgaa tctccctata 570

<210> 405
 <211> 182
 <212> DNA
 <213> Mus musculus

<400> 405
 gaattcgcgg ccgcgtcgac atcatggcta ccctgcgtgt cccactcctg gtggctctcg 60
 tccttcttgc tgtggcaatt cagacctctg atgcaggctc ctatggtgcc aatgtggaag 120
 acagtatctg ctgccaggac tacatccgtc accctctgcc atcacgttta gtgagtcgta 180
 tt 182

<210> 406
 <211> 545
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (184)

<400> 406
 gaattcgcgg ccgcgtcgac ccggaacccc aaccgctgca actctccgcg tccgaaatcc 60
 agcatcccg agtctgcgtc cgcaccatgc agctaaagt tccctgtttt gtgtccttgg 120
 gaaccaggca gcctgttttg aagaagctcc atgtttctag cgggttcttt tctggtcttg 180
 gtcngttctt gctgctgttg agcagcctct gtgctgcctc tgcagagact gaagtcgggtg 240
 caatgggtgg cagcaatgtg gtgctcagct gcattgacct ccacagacgc catttcaact 300
 tgagtggtct gtatgtctat tggcaaatcg aaaaccacaga agtttcgggtg acttactacc 360
 tgccttacaa gtctccaggg atcaatgttg acagttccta caagaacagg ggccatctgt 420
 ccctggactc catgaagcag ggtaacttct ctctgtacct gaagaatgtc acccctcagg 480
 ataccagga gttcacatgc cgggtattta tgaatacagt cacagagtta gtcgagatcc 540
 tcgag 545

<210> 407
 <211> 331
 <212> DNA
 <213> Gallus sp.

<400> 407
 gaattcggcc aaagaggcct agtggtatat atactgggag aacaatagac tgtattcatt 60
 gtgggtattat ccaaagatct gttttctact gccctgactt aaagcagagt acctctgtgg 120
 cctatctttc ccctttggcc ccaagatgac aataatagct gcaatcagtt gtgttttctt 180
 attttccatt ctctgtgaaa caagtgcatt agtggtaccc aactccactg acctactcct 240
 gtcaaacaat aatttcactg acattgagac ggctttggca gtcactctgg actcagcaaa 300

aattcccaaa gccaggcgga gtgcgctcga g

331

<210> 408
<211> 282
<212> DNA
<213> Gallus sp.

<220>
<221> unsure
<222> (141)

<220>
<221> unsure
<222> (143)

<220>
<221> unsure
<222> (145)

<400> 408
gaattcggcc aaagaggcct ataggcctct ttggccggcc aaagaggcgt actcagtgt 60
tatatgtaac tgtcattgat aagagttaca taggcataca gagggagaac atctgtatgt 120
tgcattgatag ttgttttaga ngnanaacta ggattgagtt actcaaatta gtgtttgtga 180
attatagaac taagctttac cttcaaatga aaatttcaaa ttactttttg gtttgtgcat 240
atcttttttaa ttgtagttc tgtattagtc gtacgcctcg ag 282

<210> 409
<211> 311
<212> DNA
<213> Gallus sp.

<400> 409
gaattcggcc aagaggccta agaagaatgt ggacgaatcc aaaccttcgc tgccttttag 60
ctctagcttt tttatgttta acaagcttag tgcattagtc agagataggt tctcaagggg 120
acccccagaa tttaaaatgt gtcacgcaca atttacataa aatgggtctgt acttgggaga 180
tctcatctga aagaagacat ggacaaactg agttttgtta cgctacagag tgttttaaaa 240
ctaaggagga gagatcgag attccagtc cagagagctc caccactgtg aaaataacca 300
catcactcga g 311

<210> 410
<211> 382
<212> DNA
<213> Gallus sp.

<400> 410
gaattcggcc aaagaggcct agtgcattta aatccaggcc atttgcagtt gctgacttca 60
cgcattacag aaagtgaatc caaacaccag gttggaacat ctttgatccc tggagaagtt 120
cagcctttgt cttcattggg tgttagacct tgtgtatata aatgataggt gcaaccgaag 180
gaggatgttc actctcatct tttttcttgt agcaatgcgt ctgtgcacgg aggaatgcag 240
ggttctaggc cactctgacc agtgcctgat gccaccgttg ccatctccct catccgatta 300
caggagtaac atgttcatcc ctggggagga gtttcagtca caacagcagc agctgcagca 360
acagcagcag cagggcctcg ag 382

<210> 411
<211> 521
<212> DNA
<213> Gallus sp.

<400> 411
gaattcggcc aaagaggcct atcaaaatga agatactgaa atggactttg ggtatgctgt 60

```

tggtccctact gttgtctatc gggcgctgta cagaaccatc gaccctcaac aaaacatccc 120
aacggagaca tcctcgttcc acagatgggtg gagaggaagg gaggaatgt ggttacacct 180
tcttggtccc agaacaaaaa atcacagggtc caatctgtgt gaataacgaa ccagggtactg 240
gtaacagaaa agatgaagtc acaagaatgg acatagagaa cttgaaggat gtgctgtcca 300
agcaaaaacg tgagattgac atcttgagtg tggtggtaga cgtggatgga aacattgtga 360
atgaagtaaa gttgctgagg aaagaaagcc gtaacatgaa ctctcgggtc actcaactct 420
atatgcaact cttgcatgag ataatccgaa agcgcgataa ctcaactgaa ctttcccaac 480
tggaaaataa agtcctcaat gtaacaacag aaagtctcga g 521

```

```

<210> 412
<211> 301
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (215)

```

```

<400> 412
gtttggggggg ttattttattt tgccctgtcct tatccctgct tggacacctg agcatctgat 60
tcctgtcccc ctgggtgccat ctggcctggc tggagccagg aacaggaggg acacttcccc 120
agaatccgca tgtttcccca gtgattacac tccactgcca ccgtgggtgcc tggctttaac 180
tcccaccctt gctatgactc ctctctgcag agacnccgact ggcggtctcca gcagggacta 240
cctttcttat aaaccagggt ggaccacaca cacacacaca cacacacaca cattactcga 300
g 301

```

```

<210> 413
<211> 413
<212> DNA
<213> Homo sapiens

```

```

<400> 413
gaattcggcc aaagagcatc tgaagatcag ctattagaag agaaagatca gttaatgctc 60
ttggacctga tcagcttgat acaagaacta ctgatttcaa cttctttggc ttaattctct 120
cggaacgat gaaatataca agttatatct tggcttttca gctctgcacg gttttgggtt 180
ctcttggtctg ttactgccag gacccatctg taaaagaagc agaaaacctt aagaaatatt 240
ttaatgcagg tcattcagat gttagcgata atggaactct tttcttaggc attttgaaga 300
attggaaaaga ggagagtgc agaaaaataa tgcagagcca aattctcttc ttttacttca 360
aactttttaa aaacttttaa gatgaccaga gcatccaaaa gagtgtggtc gag 413

```

```

<210> 414
<211> 496
<212> DNA
<213> Homo sapiens

```

```

<400> 414
gaattcggcc aaagaggcct agcttcagga tccctgaaagg ttttgcctta cttcctgaag 60
acctgaacac cgctcccata aagccatggc ttgccttgga tttcagcggc acaaggctca 120
gctgaacctg gctaccagga cctggccctg cactctcctg tttttcttct tcttcacccc 180
tgtcttctgc aaagcaatgc acgtggccca gcttgcctgt gtactggcca gcagccgagg 240
catcgccagc tttgtgtgtg agtatgcac tccaggcaaa gccactgagg tccgggtgac 300
agtgcctcgg caggctgaca gccagggtgac tgaagtctgt gcggcaacct acatgatggg 360
gaatgagttg accttcctag atgattccat ctgcacgggc acctccagt gaaatcaagt 420
gaacctcact atccaaggac tgaggggccat ggacacggga ctctacatct gcaagggtgga 480
gctcatgtac ccccg 496

```

```

<210> 415
<211> 290
<212> DNA
<213> Homo sapiens

```

<400> 415

```

gaattcggcc aaagaggcct agaacaaccc agaaaccttc acctctcatg ctgaagctca 60
cacccttgcc ctccaagatg aaggtttctg cagcgcttct gtgcctgctg ctcatggcag 120
ccactttcag ccctcaggga cttgctcagc cagattcagt ttccattcca atcacctgct 180
gctttaacgt gatcaatagg aaaattccta tccagaggct ggagagctac acaagaatca 240
ccaacatcca atgtcccaag gaagctgtga tcttcaagac catggctcgag 290

```

<210> 416

<211> 529

<212> DNA

<213> Homo sapiens

<400> 416

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttccttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
ggaagacatg aatgtcaagt ttttcaatag caacaaaaag aaacgagatg acttcgaaaa 480
gctgactaat tattcggtaa ctgacttgaa tgtccaacgc aaagtcgag 529

```

<210> 417

<211> 385

<212> DNA

<213> Homo sapiens

<400> 417

```

gaattcggcc aaagaggcct aggcaaacgc agaacgtttc agagccatga ggatgcttct 60
gcatttgagt ttgctagctc ttggagctgc ctacgtgtat gccatcccca cagaaattcc 120
cacaagtgca ttggtgaaag agaccttggc actgctttct atcctcgaag ctctgctgat 180
agccaatgag actctgagga ttctgttccc tgtacataaa aatcaccaac tgtgcactga 240
agaaatcttt caggggaatag gcacactgga gagtcaaact gtgcaagggg gtactgtgga 300
aagactatlc aaaaacttgt ccttaataaa gaaatacatt gacggccaaa aaaaaaagtg 360
tggaagaaga agacggagag tcgag 385

```

<210> 418

<211> 415

<212> DNA

<213> Homo sapiens

<400> 418

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttccttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg tcgag 415

```

<210> 419

<211> 439

<212> DNA

<213> Homo sapiens

<400> 419

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttccttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180

```

```

ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
ggaagacatg aatgtcgag 439

```

<210> 420

<211> 415

<212> DNA

<213> Homo sapiens

<400> 420

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg tcgag 415

```

<210> 421

<211> 529

<212> DNA

<213> Homo sapiens

<400> 421

```

gaattcggcc aaagaggcct actgaagatc agctattaga agagaaagat cagttaagtc 60
ctttggacct gatcagcttg atacaagaac tactgatttc aacttctttg gcttaattct 120
ctcggaaacg atgaaatata caagttatat cttggctttt cagctctgca tcgttttggg 180
ttctcttggc tgttactgcc aggaccata tgtaaaagaa gcagaaaacc ttaagaaata 240
ttttaatgca ggtcattcag atgtagcgga taatggaact cttttcttag gcattttgaa 300
gaattggaaa gaggagagt acagaaaaat aatgcagagc caaattgtct ccttttactt 360
caaacttttt aaaaacttta aagatgacca gagcatccaa aagagtgtgg agaccatcaa 420
cgaagacatg aatgtcaagt ttttcaatag caacaaaaag aaacgagatg acttcgaaaa 480
gctgactaat tattcggtaa ctgacttgaa tgtccaacgc aaagtcgag 529

```

<210> 422

<211> 386

<212> DNA

<213> Homo sapiens

<400> 422

```

gaattcggcc aaagaggcct aaagacatta caccatctga attgcctgca aaccaggtt 60
gtgtgcattc aaaagagcat tctattaaag ctaccttaat ttggcgctta tttttcttaa 120
tcatgtttct gacaatcata gtgtgtggaa tgggtgctgc tttaagtgc ataagagcta 180
actgccatca agagccatca gtatgtcttc aagctgcatg cccagaaagc tggattgggt 240
ttcaaagaaa gtgtttctat ttttctgatg acaccaagaa ctggacatca agtcagaggt 300
tttgtgactc acaagatgct gatcttgctc aggttgaaag cttccaggaa ctgaatttcc 360
tgttgagata taaaggcccc gtcgag 386

```

<210> 423

<211> 443

<212> DNA

<213> Homo sapiens

<400> 423

```

gaattcggcc aaagagtctg gatggcatct acttcgtatg actattgcag agtgcccatg 60
gaagacgggg ataagcgtcg taagcttctg ctggggatag gaattctggg gctcctgac 120
atcgtgatct tgggggtgcc cttgattatc ttcaccatca aggccaaacg cgaggcctgc 180
cgggacggcc ttcgggcagt gatggagtgt cgcaatgtca cccatctcct gcaacaagag 240

```

```

ctgaccgagg cccagaaggg ctttcaggat gtggaggccc agccgccacc tgcaaccaca 300
ctgtgatggc cctaattggc tccctggatg cagagaaggc ccaaggacaa aagaaagtgg 360
aggagcttga gggagagatc actacattaa accataagct tcaggacgcg tctgcagagg 420
tggagcgact gagaagagtc gag                                     443

```

<210> 424

<211> 455

<212> DNA

<213> Homo sapiens

<400> 424

```

gaattcggcc aaagaggcct atctgaagat cagctattag aagagaaaga tcagttaagt 60
cctttggacc tgatcagctt gatacaagaa ctactgattt caacttcttt ggcttaattc 120
tctcggaaac gatgaaatat acaagttata tcttggcttt tcagctctgc atcgttttgg 180
gttctcttgg ctgttactgc caggacccat atgtaaaaga agcagaaaac cttaagaaat 240
attttaatgc aggtcattca gatgtagcgg ataatggaac tcttttctta ggcattttga 300
agaattggaa agaggagagt gacagaaaaa taatgcagag ccaaattgtc tccttttact 360
tcaaactttt taaaaacttt aaagatgacc agagcatcca aaagagtgtg gagaccatca 420
aggaagacat gaatgtcaag tttttcaata gcaag                                     455

```

<210> 425

<211> 365

<212> DNA

<213> Homo sapiens

<400> 425

```

gaattcggcc aaagaggcct aggtggaat tccagcaaga atagaggaga agacaagcca 60
ccaggactca ggagggaaac gctgaccatt agaaacctct gcataagacg ttgtaaggag 120
gaaaataaaa gagagaaaaa cacaagatt taaacaagaa acctacgaac ccagctctgg 180
aaagagccac cttctccaaa atggatatgt ttctctcac ctgggttttc ttagccctct 240
acttttcaag acaccaagtg agaggccaac cagaccacac gtgaggagggt cgtttgaatt 300
ccaaagatgc tggctatatc acctctccc gttaccccca ggactacccc tcccaccttg 360
tcgag                                     365

```

<210> 426

<211> 557

<212> DNA

<213> Homo sapiens

<400> 426

```

gaattcggcc aaagaggcct acaattataa aatgtcagct ttttaaggaaa actgtggaat 60
atattttcca gaaataaaaa gagatccagg cagatattta catagttgtc ctgaatctgt 120
gaaaaaatgg cttcgacagc taaagaatgc tgggaaaatt cttctgttaa ttaccagttc 180
tcacagtgat tactgtagac ttctctgcga atatattctt gggaatgatt ttacagacct 240
ttttgacatt gtgattacaa atgcattgaa gcctgggttc ttctccact taccaagtca 300
gagacctttc cggacactcg agaattatga ggagcaggag gcaactgcat ctctggataa 360
acctggcttg tactcccaag ggaacgctgt ccacctctat gaacttctga agaaaatgac 420
tggcaaacct gaacccaagg ttgtttatgt tggtagacgc atgcattcag atattttccc 480
agctcgtcac tatagtaatt gggagacagt cctcatctcg gaagaactca gaggggatga 540
aggcacgagg agtcgag                                     557

```

<210> 427

<211> 468

<212> DNA

<213> Homo sapiens

<400> 427

```

gaattcggcc aaagaggcct aacaggatca acacatttca tctgggcttc ttaaattctaa 60
atcttttaaaa tgactaagtt ttcttccttt tctctgtttt tcctaatagt tggggcttat 120
atgactcatg tgtgtttcaa tatggaaatt attggaggga aagaagtgtc acctcattcc 180

```



```

aggccattta tggcctccat ccagtatggc ggacatcacg tttgtggagg tgttctgatt 240
gatccacagt ggggtgctgac agcagcccac tgccaatadc ggtttaccaa aggccagtct 300
cccactgtgg ttttaggcgc acactctctc tcaaagaatg aggcctccaa acaaacactg 360
gagatcaaaa aatttatacc attctcaaga gttacatcag atcctcaatc aaatgatadc 420
atgctgggta agcttcaaac agccgcaaaa ctcaataaac atgtcgag 468

```

<210> 428

<211> 333

<212> DNA

<213> Homo sapiens

<400> 428

```

gaattcggcc aaagaggcct acaagcttct aggacaagag ccaggaagaa accaccggaa 60
ggaaccatct cactgtgtgt aaacatgact tccaagctgg ccgtggctct cttggcagcc 120
ttcctgattt ctgcagctct gtgtgaagggt gcagttttgc caaggagtgc taaagaactt 180
agatgtcagt gcataaagac atactccaaa cctttccacc ccaaatttat caaagaactg 240
agagtgtatt agagtggacc aactgctgcc aacacagaaa ttattgtaaa gctttctgat 300
ggaagagagc tctgtctgga cccaagggtc gag 333

```

<210> 429

<211> 307

<212> DNA

<213> Homo sapiens

<400> 429

```

gaattcggcc aaagaggcct agctgacact cgagcccaca ttccgtcacc tgctcagaat 60
catgcagggt tccactgctg ccttctgtgt cctcctctgc accatggctc tctgcaacca 120
gttctctgca tcaacttgctg ctgacacgcc gaccgcttgc tgcttcagct acacctccc 180
gcagattcca cagaatttca tagctgacta ctttgagacg agcagccagt gctccaagcc 240
cgggtgtcatc ttcctaacca agcgaagccg gcagggtctgt gctgacccca gtgagggtgtg 300
ggtcgag 307

```

<210> 430

<211> 348

<212> DNA

<213> Homo sapiens

<400> 430

```

gaattcggcc aaagaggcct acaaaacgct gattaaaaga agcacggtat gatgaccaa 60
cataaaaagt gttttataat tggtgggtgt ttaataacaa ctaatattat tactctgata 120
gttaaaactaa ctcgagattc tcagagttta tgcccctatg attggattgg tttccaaaac 180
aaatgctatt atttctctaa agaagaagga gattggaatt caagtaaata caactgttcc 240
actcaacatg cggacctaac tataattgac aacatagaag aaatgaattt tcttaggcgg 300
tataaatgca gttctgatca ctggattgga ctgaagatgg cagtcgag 348

```

<210> 431

<211> 359

<212> DNA

<213> Homo sapiens

<400> 431

```

gaattcggcc aaagaggcct aatttttttt atttagtttt ccttgttggg attattggaa 60
gttgttttgc aacctgggct tttatacaga agaatacga tcacagggtgt gtgagcatct 120
acttaattaa tttgcttaca gccgatttcc tgcttactct ggcattacca gtgaaaattg 180
ttgttgactt ggggtgtggc ccttggaagc tgaagatatt ccaactgccaa gtaacagcct 240
gcctcatcta tatcaatatg tatttatcaa ttatcttctt agcatttgtc agcattgacc 300
gctgtcttca gctgacacac agctgcaaga ctaccgaat acaagaaccc ggagtcgag 359

```

<210> 432

<211> 922

<212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (787)

<220>
 <221> unsure
 <222> (803)

<220>
 <221> unsure
 <222> (817)

<220>
 <221> unsure
 <222> (853)

<400> 432
 gaattcggcc aaagaggcct aaattggagg catgatgaag actctgctgc tgtttgtggg 60
 gctgctgctg acctgggaga gtgggcagggt cctggggggac cagacgggtct cagacaatga 120
 gctccaggaa atgtccaatc agggaaagtaa gtacgtcaat aaggaaattc aaaatgctgt 180
 caacgggggtg aaacagataa agactctcat agaaaaaaca aacgaagagc gcaagacact 240
 gctcagcaac ctagaagaag ccaagaagaa gaaagaggat gccctaaatg agaccaggga 300
 atcagagaca aagctgaagg agctcccagg agtgtgcaat gagacccatga tggccctctg 360
 ggaagagtgt aagccctgcc tgaacagac ctgcatgaag ttctacgcac gcgtctgcag 420
 aagtggctca ggcctgggtg gccgccagct tgaggagtgc ctgaaccaga gctcgccctt 480
 ctacttcttg atgaatgggt accgcatcga ctccctgctg gagaacgacc ggcagcagac 540
 gcacatgctg gatgtcatgc aggaccactt cagccgcgcg tccagcatca tagacgagct 600
 cttccaggac aggtttctca cccgggagcc ccaggatacc taccactacc tgcccttcag 660
 cctgccccac cggaggcctc acttcttctt tcccaagtcc cgcacgttcc gcagcttgat 720
 gcccttctct cgtacgagc ccctgaactt ccacgccatg ttccagccct tccttgagat 780
 gatacangag gctcagcagg cntggacat ccacttnac agcccgccct tccagcacc 840
 gccaacagaa ttnatacag aaggcgacga tgaccggact gtgtgccggg agatccgcca 900
 caactccaca ggcaacctcg ag 922

<210> 433
 <211> 311
 <212> DNA
 <213> Homo sapiens

<400> 433
 gaattcggcc aaagaggcct agtgtgagcc accacgcccg gcctagagtg ttttcttta 60
 tcttttccag ttatttctac ttttttctgt ccgagcttat cctttgggct ttcccccaat 120
 aggactgttg agtcagttac tgacttagca cagtgaatat gcgtcctaata acattcttta 180
 ttttttattt tattttattt ttgagacgga gtctcgctct gttgccaggc tggagtgcag 240
 tggcgcgatc tcgggtcacc acaacctctg actccctggt tcaagcgatt ctctgcctc 300
 agcctctcga g 311

<210> 434
 <211> 513
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (275)

<220>

<221> unsure
<222> (345)

<220>
<221> unsure
<222> (405)

<220>
<221> unsure
<222> (461)

<400> 434
gaattcggcc ttcattggcct aggattctac caggggaaga gactgctgca ggtcctatga 60
gattaaggat aaagaatgga aggcccgact ctagagtatg agagaggctt cagttacctt 120
tggtgtggga taggacaggc tacaatggcc aggatacaag atgcaatggt tgactacttc 180
atggagggga gagggaggcag gcaagcactg ctattggctg gctgtgggca gagtaaatgc 240
ttctacttgt aaacaaatat aacttcttgc cagtnaactt gttccccca ggatctgtct 300
gcatctcctt attttctct atagtcacatc aggagaacta aaaaanattgg gataagccac 360
agagatgtca ttgataatag tagtaagagg agctaataatt tattngacat ctaatctgtg 420
cctgcatgta ggtaactcta ttactcattt tagaatgaaa nagacaaatg agtaatcagg 480
ttgatttatt tactcaaagt cacggctctc gag 513

<210> 435
<211> 507
<212> DNA
<213> Homo sapiens

<400> 435
gaattcggcc ttcattggcct acacgaatcc tatcaattct cactcaacat ttcctgtctc 60
tcactctccc gttctgtcag ttcacatgaa acattctctg ccttctctac tcccatacgg 120
ttggctttca ctgtctgttt ctgccttctt cactctcaca cagtcagctc tcaactcaaca 180
tttctgtcct cccgcccctcc catattctgt cacttctcac tcagtattcc cggccgtcct 240
gaccctgagt gttcccgggt catgtcagtt cccaatgaac acttctctggc ctccattctc 300
actacgcagc tcctcttctt cgcacaaatc ctgttgcttc tcattcaaca ctctctgcct 360
tcctcacttt ccttggtgta gttctcagga acatttccag ttcttttcca tcaatcctgt 420
tttgtctccc aatcttctct ttctgccttg tcaaactcta aggatgacct tcctggaaca 480
atgacagtgt tttaccaccc actcgag 507

<210> 436
<211> 513
<212> DNA
<213> Homo sapiens

<400> 436
gaattcggcc aaagaggcct actttaaatc aagcagattt ggccaggcac ggtagctcat 60
gcctgtaatc ccagcacttt gggaggctga gctgggtaga tcacctgagg tcaggagttc 120
gagaccagcc tgaccaacat ggagaaaccc cgtctgtact aaaaatacaa aattaacagg 180
gcgtggtgtc atgtgcctgt aatcccagct acttgggagg ctgaggcggg agaatcgctt 240
gaaccgggga ggcaagtttt gcagttagcc gatatcgtgc cattgcactc cagcctgggc 300
aacaagagtg aaactcagtc ctcaataaat aaataaataa ataaagcaaa ttctcatgaa 360
gcaaatggta ataactctaa tttattggaa gggccacaag aaagggggaa aagaacaact 420
aaaaaaaaac tttttctacc aacattaact tgtcctaaca atcaacttat ttttgcttta 480
atggttctct ctcttctcaa atggtggctc gag 513

<210> 437
<211> 460
<212> DNA
<213> Homo sapiens

<400> 437

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gaattcggcc ttcattggcct acaccagtga gtcattcagggt ttcccagggc tcttggactt 60
cccagtactt cctctaaact acttcccttt cacttccccg accatctaga tataacatgt 120
cgtcttttctt ccagcagctt gaacttttctt cctagccctt cacttaacct ttgccacttc 180
ccttacaacc cactctctct ctgtcacttt ttcaaaatga tcttcttcca cagaagcctg 240
gagacactga agttgtccct ggccaagtgg acacaggggac tatggccccc atgatcatgt 300
cttccctctc ttccctccct gcagtaataa ctgagccagc aggcccagat ttgggggaccc 360
cattcaccag ccgectaccc ccagaacttc aggtcctaaa ggacgaacag gcccatcggg 420
tggcccccaa gggtaatcag tctcgcacct tgagctcgag 460

```

<210> 438

<211> 402

<212> DNA

<213> Homo sapiens

<400> 438

```

gaattcggcc ttcattggcct agttacaaaa tggaaagcag aggtcattcc atcattcatg 60
gtggccatca gacaacaaca cagcagttgc ttaggagaag catgggtctt cttcgtacgc 120
acaactgaga gaaatttccc ttaaagtggga cactgagttg gatgatacaa tgaatctaata 180
ggctacacat aatcatgaaa atcatggggc cctttattgt aatgtttctc atgcgggcta 240
acatgcgtag ttctagggaa aatatgatgc tgtccaaaca tacagctatt tggtttggct 300
tatctaaaga taaaatacat agtatccaga gaaatagatg aactgtatgt cctccataca 360
gtctcccata aatattattt ctttttgcag ctgacctctg ag 402

```

<210> 439

<211> 374

<212> DNA

<213> Homo sapiens

<400> 439

```

gaattcggcc ttcattggcct aggaagagga taaaatggaa gatcaaaaca ttatccaggc 60
tccacagaaa gaagtaggaa agggctgcga tcttgatgcc caccceaaga gcacaggtgt 120
cttccaggat gaagagctgc ttttcagcca caagctccaa aaggacaatg acccagatgt 180
tgaccttttt gctggcacca aaaaaaccaa gctgttagag ccaagtgttg ggagcctgtt 240
tgggggatgat gaagatgatg atcttttcag ctctgccaaag tcccagcctt tgggtacaaga 300
gaaaaagaga gtagtgaaaa aagaccactc tgttaactct ttcaaaaacc agaaacatcc 360
tgaatccact cgag 374

```

<210> 440

<211> 281

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (48)

<400> 440

```

gaattcggcc ttcattggcct aggtgtggaa agaaaacaaa acaaaacnag aaatctcttg 60
taaaatattc caggtcaaaag ttgtctcttc tccaaacctt gcagaagcac ctttcttctc 120
ttcagcgcac tgttttggga ctgtttatgc agcagatgta agtagacaac atggactcca 180
tgtgacatgc ctctaatagt aaagataaag tattactgag gttaaaaaata aaaattgagt 240
agtattaatt taaagtgcac catcaggaca acaaaactcg a 281

```

<210> 441

<211> 306

<212> DNA

<213> Homo sapiens

<400> 441

```

gaattcggcc ttcattggcct aagagttgtg tggttcctcc cattggtttc taggctgttt 60

```

```

gttgttttga tttgtattga taggagacct acagtggcca cagctgattc catggaattt 120
tttttagcatc tgtattcaaa atattctttt tagactgtga gaataaaacc aaaacaaaaa 180
actctagctt tgaaagatac taaattgtag atattataga gtaggttttt gttttgtttt 240
gttttttttga gacaaagtct agctagcttt gttgcctagg ctggagtgtg atgacaccat 300
ctcgag                                     306

```

<210> 442

<211> 273

<212> DNA

<213> Homo sapiens

<400> 442

```

gaattcggcc ttcatggcct agaaataata aaaagtactg aacaggaagg gcttctggag 60
actttctccag agattgcacac caagcatttc attagggccc actttgtgac tattctgtta 120
gtcacaaatc taccaaatta tcccatagtt taaccattta ctcttaaat atttatgtgt 180
ataggaaatta cctggctata ttgttaaagt gcagttttct gtaggtcttc cctctctctc 240
tcccctctac tggctctccc cccccaactc gag                                     273

```

<210> 443

<211> 334

<212> DNA

<213> Homo sapiens

<400> 443

```

gaattcggcc ttcatggcct acattagtgt agatttctgc aggaacatct atccagggtg 60
gaggtcgaat aagtgcagga aaaggcacat aagcccaata agaataattt tgtgtagcag 120
gtaaatcagt gtgagaggaa actggtgaga cagaaagtat aaggaggaga ataattaaat 180
aaaaccaggt gtaagcgaga ttgagtgtctg aaggaggaag agaagaacag agggatgtta 240
ttgtcaggct aatagaaatc gctgtcgcct taatccaagc ctacgttttc acacttctag 300
taagcctcta cctgcacgac aacacagact cgag                                     334

```

<210> 444

<211> 300

<212> DNA

<213> Homo sapiens

<400> 444

```

gaattcggcc ttcatggcct agcaatatac aattttaaaa atacacatac atacatacat 60
atgtatacat ttccagtttt aagattttgc gagggcttta taagaaaaca aaaattccct 120
caggctatag aattatgttg tcatatatca gaaaagtact gatgtatcca tttatatcca 180
atgcgcacca caccggcaca ttgtgattta attcaccgct tgaatctata tttctaacca 240
cagtacttcc agtaaaaata ccgtataatg aacatttcag cttcttctta cttactcgag 300

```

<210> 445

<211> 309

<212> DNA

<213> Homo sapiens

<400> 445

```

gaattcggcc ttcatggcct agtttgacca tttgtagtat acacagtga acttgattct 60
ctgttgcata aaacactata tttttttgga aatgttactg tccaaaagcc ttttccctcc 120
ctttcctttt cctatgtact tccttcatac ttgctttact gatcagccag gcaatagcca 180
tccaagagct agagcatgaa acagggccct ttccaagtag gctctgggtg tcctaagcca 240
gcgtgtgccc tctggttttag tgagtgtaat agagtccctg gcacctttct ttgcaaatga 300
ggactcgag                                     309

```

<210> 446

<211> 177

<212> DNA

<213> Homo sapiens

<400> 446
gaattcggcc ttcattggcct aattgaattc tagacctgcc tggggctctg tctttcattg 60
tgggagagag atgggggagt aatttttgcg tctctggaca gagccccagg gccgggaaag 120
ggcacacaat ggggttcttg atgctttctc ccttggtctaa ccagaagatc actcgag 177

<210> 447
<211> 325
<212> DNA
<213> Homo sapiens

<400> 447
gaattcggcc ttcattggcct aattgtatcg taacctttaa accaatctcc agctgtatgg 60
gagatggtac ttttactatc cccattttat aaatgaggaa attgaggtat agagcagtaa 120
aataattttc ccggttaagc aggttaagtgc tacaactgtg attgaccttt gaacctgacc 180
ccagagcact gatgtaatct gtctgtaccc aaaatgggtt cagtttatct ttattcaggc 240
gcagttcaaa gaattcttct ctttgctttt taactactct attctccctg gtgactagga 300
tatcttatac ccccttgagc tcgag 325

<210> 448
<211> 299
<212> DNA
<213> Homo sapiens

<400> 448
gaattcggcc ttcattggcct aaattttaa ggtgtatata ttcttcaacc tgaagttatt 60
tcagcatcag ctgatggaag taaaataaca gctcaagact cattggtggg acctattttt 120
cagatgtttc aagatagtgg ttttcagaaa aactgggtctt ggaactcatt ttccaagatt 180
catcctcaag tagtaaatcc tgtgcaacag ccaggacaca gattgcttat tctctggaga 240
atactgtaca aaaaaacttt atggtatcaa gcacaattaa atcgaagagt tcctgaagc 299

<210> 449
<211> 326
<212> DNA
<213> Homo sapiens

<400> 449
ctcgagactc tgggagttca acaccaacct agcaaatga caaaaccccg cctctacaaa 60
cataaataaaa aaacaaaaat cattaacctt gagtgtatga agttcatctg cagactgaaa 120
aaaataaagt gtaacagaat tttgatttaa aaaacgcttt caaaaaagca tttcaaaatg 180
ctctaagtat gtttcaaaaa tacacttaaa aatatgtttc caacacactg aagggtattta 240
actaagatcc acaattacag ttacgataca aactgtaagc taaaaggcag caacttaagc 300
tgagacagtt actaacatcc ctcgag 326

<210> 450
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (164)

<220>
<221> unsure
<222> (301)

<220>
<221> unsure
<222> (380)

<400> 450
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 aatattatga agtagaattc cagattataa taagttattt agccaaaatg atgactcaaa 120
 aattttttaa aaggcaaaaa ctttttttca ttaagagaga agantcagct ttccaatcta 180
 ctctgtctt aactgcctgt tttttggaag tttattctca aggtgcaaac aaaagtcttt 240
 aattattctt tcctattaca tgaacatctt attcaaggga gagaaagcca aaattcacc 300
 ntgatttagt ctacggttta catcaacccc aactttttaa tgaaacctta tagatgattc 360
 tctctgatct cagccagttt tctcgag 387

<210> 451
 <211> 318
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (141)

<400> 451
 gaattcggcc ttcattgccta caggaatgca ttcttgacat ttccgaacac acattaagt 60
 aaaatgactt agaagaacta agggtagatc actataaatg taacatacag gcatctgtac 120
 atgtttctga tttcagtaca nataatagt gatctcaacc aaaacagaag tcagatactg 180
 tgctttttcc agcaaaggat ctcaaggaaa aggaccttca ttcaatattt actcatgatt 240
 ctgggtctgat aacaataaac agttcacaag agcacctaac tgttcaggca aaggctccat 300
 tccatactcc tcctcgag 318

<210> 452
 <211> 467
 <212> DNA
 <213> Homo sapiens

<400> 452
 gaattcggcc ttcattggcct aagaaactac agtaaaactgt catccatgat cccactgcag 60
 agaaaacat tgccgacatt tttgagcatt tcctaccagt tcccccttc caaagttaa 120
 ttatttataa accgtcactc tgaggaaagt tgattgtgtt cgtaagaaaa ctcatggctt 180
 aggagccaga gtaagcagga ctactatgtt aaacagcagg tttgactaat atattttctt 240
 aattgcatca aacactagtgt ttatattaag tcaaaagtct tcacagatta tttttctcaa 300
 gaggatttca gtgcttcagt gtgcacatta atatcagttc cacttgcttt tcagtgtgt 360
 catagtaagt agacgttata agtgaatata aatctacctc taaagagatt attgatttgt 420
 tttattttac ttaagatttg aattccaaat ccagtacaca gctcgag 467

<210> 453
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 453
 gaattcggcc ttcattggcct agcttcagtt ttcattcatt ctctgtctca gcactgtcag 60
 ccaagagctt actcagcaga caccacatac tgcagcagtt cctagtgaga aaatctgtgc 120
 cactagaaaa tgcttcacct ccatttcttc acctggggcag ttctctgttt aaaattgttg 180
 gctgatttgg tcttctcttc ctctctccac tgttactgcc ctgcagccct tgttcagggtg 240
 tacagaccct tattctggcc tctagtgtcc ttgtctgtca tgacacaccc ttccgcccac 300
 atacctctga ccccaactcg ag 322

<210> 454
 <211> 263
 <212> DNA
 <213> Homo sapiens

<400> 454

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gaattcggcc ttcattggcct aagggattta aagagttttt cttgggtggt tgtcaaactt 60
ttattccctg tctgtgtgca gaggggattc aacttcaatt tttctgcagt ggctctgggt 120
ccagccccctt acttaaagat ctggaaagca tgaagactgg gctttttttc ctatgtctct 180
tggaactgc agctgcaatc ccgacaaatg caagattatt atctgatcat tccaaaccaa 240
ctgctgaaac ggcagcactc gag                                     263

```

<210> 455

<211> 536

<212> DNA

<213> Homo sapiens

<400> 455

```

gaattcggcc ttcattggcct aggtgggtggg tgctccgcct gcactaggcg cacccttgca 60
gaggtggctg gttgtctctt gaagggtccc ctggatggta atcctggctg ctttctgcac 120
ttgtatataa agtcctcccc aagatggcct gtggtctgct tcttggaac caagaagccc 180
gcagtgccat gtgacacctg aggcattggac tggagcccca aaggcagggt acacccttct 240
cctgaacctg ctttttcttt cctctatatg gctccatttg tggcaaagtt gttgcaactga 300
aacttgtgca tgctgggcaa ggacaagctg gctcaaagag caaccagcca cctctgcaaa 360
ggtgtagcag gagccgggtg accagtcacc aattagcgtc cggacatgta catcacttct 420
tccaccctaa aggtagggcc acagtgccat ctgcttttct taaggcctct gctccatcag 480
caataagggt gcagacactc aggcctgtggg aacctggcca tccccacttc ctcgag 536

```

<210> 456

<211> 757

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (193)

<220>

<221> unsure

<222> (345)

<400> 456

```

gaattcggcc aaagaggcct aggcctgctc ctgcagcaac caggccagcc gggatgatctg 60
cacacggaga gacctggccg aggtcccagc cagcatcccg gtcaacacgc ggtacctgaa 120
cctgcaagag aacggcatcc aggtgatccg gacggacacg tacaagcacc tgcggcacct 180
ggagattctg canctgagca agaacctggg gcgcaagatc gaggtgggag ccttcaacgg 240
gctgcccagc ctcaacacgc tggagctttt tgacaaccgg ctgaccacgg tgcccacgca 300
ggccttcgag tacctgtcca agctgcggga gctctggctg cgganacaacc ccatcgagag 360
catccccctc tacgccttca accgcgtgcc ctgcctgccc cgcctggacc tgggcgagct 420
caagcggctg gaatacatct cggaggcggc cttcgagggg ctggtcaacc tgcgctacct 480
caacctgggc atgtgcaacc tcaaggacat ccccaacctg acggccctgg tgcgcctgga 540
ggagctggag ctgtcgggca accgctgga cctgatccgc cgggctcct tccagggtct 600
caccagcctg cgcaagctgt ggctcatgca cgcccaggta gccaccatcg agcgcaacgc 660
cttcgacgac ctcaagtgcg tggaggagct caacctgtcc cacaacaacc tgatgtcgct 720
gccccacgac ctcttcacgc ccctgcaccg cctcgag 757

```

<210> 457

<211> 897

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (7)

<220>

<221> unsure

<222> (212)

<400> 457

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gaattcngcc aaagaggcct aaaatgtttg gcactttgct actttattgc ttctttcttg 60
cgacagttcc agcactcgcc gagaccggcg gagaaaggca gctgagcccg gagaagagcg 120
aaatatgggg acccgggcta aaagcagacg tcgtccctcc cgccccctat ttctatattc 180
aggcagtgga tacatcaggg aataaattca cntcttctcc aggcgaaaag gtcttccagg 240
tgaaagtctc agcaccagag gagcaattca cttagagttgg agtccagggt ttagaccgaa 300
aagatgggtc cttcatagta agatacagga atgtatgcaa gctacaaaaa tctgaagggt 360
gaaattaaat tccaagggca acatgtggcc aaatccccat atattttaaa agggccgggt 420
taccatgaga actgtgactg tcctctgcaa gatagtgcag cctggctacg ggagatgaac 480
tgccctgaaa ccattgctca gattcagaga gatctggcac atttcctgcg tgtggatcca 540
gaaaagattg cagtagaaat cccaaaaaga ttgggacaga ggcagagcct atgtcactac 600
accttaaaag ataacaagggt gaagatgcca gatgtggagc tctttgttaa ttggggagac 660
tggccttttg aaaaaaagaa atccaattca aacatccatc cgatcttttc ctgggtgtgg 720
tccacagatt ccaaggatat cgtgatgcct acgtacgatt tgactgattc tgttctggaa 780
accatgggccc gggtaaagtct ggatatgatg tccgtgcaag ctaacacggg tcctccctgg 840
gaaagcaaaa attccactgc cgtctggaga gggcgagaca gccgcaaaaga tctcgag 897

```

<210> 458

<211> 520

<212> DNA

<213> Homo sapiens

<400> 458

```

gcgggggatcg acaagctgcc catcgaggag acgctggagg acagcccgca gacaaggctc 60
ttactaggtg tatttgaaga agatgccaca gctatttcca actatatgaa ccagttgtat 120
caagctatgc atcggattta tgatgcacag aatgaattaa gtgcagcaac acacctgacc 180
tcaaaacttt taaaagaata tgaaaaacag cgttttccat tgggaggtga tgatgaagt 240
atgagctcta cattgaaca gttttcaaaa gttatagatg agcttagctc ttgtcatgca 300
gtgctttcaa ctcaacttgc tgatgccatg atgttcccca ttaccagtt taaagaaaga 360
gatctgaaag aaatactaac attaaaggaa gtatttcaga ttgcaagtaa tgatcatgat 420
gctgcgatta atagatatag ccgtttatca aaaaaaagag aaaatgacaa ggtgaagtat 480
gaagtaacag aagatgtgta cacatccaga aagactcgag 520

```

<210> 459

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (53)

<220>

<221> unsure

<222> (57)

<400> 459

```

gaattcggcc aaagaggcct actcaggggtg agctcttctg ttgctcattt gtnccctnaat 60
ttttaagggc tttttctcag tcaatagttt gtacaaactg gttagtttaa cttcattacc 120
catttcatta aagttgatgg gtcgtgtgat gagatgcatt taaggccgat agtgatagat 180
gtttttttta tttcttgaac acaggctttg tctgaatgat gttcttttat ctcttgaaca 240
caagctttga atgataacta caggttttaa gtgctgttac attaatacca taatgtgatg 300
tgtttagaac aaagggatat ttcaaaggta gatatttgaa aattctctag tctcaaatag 360
tatgtgtatt gaatatactc taaaaataaa tgtgcaattt gctagtagga caatgcagtg 420
actgactagc attaggtatg tttcttttat atcctagcta tgtcccactt tcttctaagt 480
gcaatccttt catgttcact tgctgtttta ccccatctac tcgag 525

```

<210> 460
 <211> 617
 <212> DNA
 <213> Homo sapiens

<400> 460
 gaattcggcc aaagaggcct acagaataat ggaatataat atgtcttcat aatataacaa 60
 cactaataca ctaatagtaa gattaagtta ggcagtcttc taccaaatgt gtaatggaga 120
 ttgcctcaaa attgtgtcca cataatccac gtcacatcttg caaagcgcta tttcaggcac 180
 atcatttgga tacaggaagt agccctgcac ctgccagtga gctcgccatt cactgattgg 240
 aagagtggacc tggcatcttg gaaatcattg tgtgtcttca ggagaatgtg cagtgtcttg 300
 taacaactaa ttataatgca aattagggtt acattgtaat ctgctttgtt aatgaaaatg 360
 ataaaacaga atattgacaa gctaggacac ctgtggtatc ttttaattgta tctccttcag 420
 aagtttgctt cttatggtat aataaagtat ggaagaatat tgagtatatg tttactcttg 480
 gcctgggaga acttaacttt ctagagcagt ttgttgactt gtgtgcaatg gggagaggta 540
 ccatgatgac actcacaggg agccactgtt cactgacact tggaagcggc cattgttaat 600
 atcacggacg actcgag 617

<210> 461
 <211> 886
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (199)

<220>
 <221> unsure
 <222> (232)

<220>
 <221> unsure
 <222> (249)

<400> 461
 gaattcggcc aaagaggcct acagcacttc tttggaaaga ggaagaatgc aaagttcagt 60
 atttcaatac tttgtatttt acttgaaatt acccttagta gcatcttttt tttcctgtct 120
 gaaagccttt gtgtggatga gaaggacat ttcatttctt cccttaacaa agtgtcattc 180
 tgagggtctc atgtgtgtnt ttggaaatag agatactggt tttgtagagt tngccttttg 240
 gtatgtttnc tttttttctt aaatctccaa ggaagagaaac tgactaaaat agtaggaaca 300
 tgaaagtatt aaatgccaat taatttggtt tagtaaaagta tcttcattag cgttatactc 360
 catcatatct ggtgtaaact gtcacagaa aaccctatga aaccaaaggg ggaccattca 420
 ggtctaaaaa gcgacaggtc cgagactggg tctgtcacct gggcattttc aaagaggaca 480
 ttttgaagaa tttgcatatt cagattttta aaatgcactt aacatacttc attacagatt 540
 tcttggttag ggaggatggg ataggccagg gatgggatgg aatcagttct gcctgggaaa 600
 ctaatccgaa tcatttacct ttctgtatta accttggcct gtcctaaaaa gagaacgact 660
 gtttcacat gagttgctct gagttttgtt aatgtttgtg ttggtggatt gacgggttaa 720
 tgaagcattt agctggaata tgaactttgg gagttttcat gttgtcctgg atttctcttt 780
 gtaaaccttt aaaccttagc ccctgggtga ttgtgttaaa cccattatga gaatgttatt 840
 taaagttgta ttataattgc aacctccatt ctagacctgc ctcgag 886

<210> 462
 <211> 396
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (146)

<400> 462
gaattcggcc aaagaggcct agtcaacatg aaggctctca ttgttctggg gcttgtcctc 60
ctttctgtta cgggtccaggg caaggtcttt gaaagggtgtg agttggccag aactctgaaa 120
agattgggaa tggatgacct ctggtngaac cctacagtcc cctactaca acccctacac 180
tctcctaccc atgacccttg gcagaacctt acagtccctt actcacgacc cctacactct 240
cctacccatg acccctgttg gaacctata gtccctact cagcaccctt acactctcct 300
acccatgacc cctggcagaa ccctacagtc ccctactcac gacccctaca gtccctact 360
catgaccctt ggagtaacct tacagtccca ctcgag 396

<210> 463
<211> 406
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (259)

<220>
<221> unsure
<222> (386)

<400> 463
gaattcggcc aaagaggcct aagaaatatg actctcttgg tagagaagct tgagacacta 60
gacaaaaaca atgtccttgc cattcgccga gaaatcgtgg ctctgaagac caagctgaaa 120
gagtggtgagg cctctaaaga tcaaaacacc cctgtcgtcc accctcctcc cactccaggg 180
agctgtgggtc atggtgggtg ggtgaacatc agcaaaccgt ctgtggttca gctcaactgg 240
agaggggtttt cttatctana tgggtgcttg ggtagggtt actctcccca gcatccaaac 300
aaaggactgt attgggtggc gccattgaat acagatggga gactgttggg gtattataga 360
ctgtacaaca cactggatga tttgcnattg tatataaatg ctcgag 406

<210> 464
<211> 395
<212> DNA
<213> Homo sapiens

<400> 464
gaattcggcc aaagaggcct agaacctctc cagcgcacg aactcagcca acgatttctg 60
atagattttt ggaggtttga ccagagatgc aaggggtgaa ggagcgcttc ctaccgttag 120
ggaactcttg ggacagagcg ccccgccgc ctgatggccg aggcagggtg cgaccagga 180
cccaggacgg cgtcggaac cataccatgg cccggatccc caagacccta aagttcgtcg 240
tcgtcatcgt cgcggtcctg ctgccagtc tagcttactc tgccaccact gcccggcagg 300
aggaagtccc ccagcagaca gtggccccac agcaacagag gcacagcttc aagggggagg 360
agtgtccagc aggatctcat agatcagaac tcgag 395

<210> 465
<211> 292
<212> DNA
<213> Homo sapiens

<400> 465
gaattcggcc aaagaggcct actatccatc tatctatcta tccatctatc catctatccc 60
tctcttcttg caataaaata tccattgagg tcacatcatg tgatcgactt cctccctctc 120
tcaatctccc tacaagtccc gaaggaaata agtacactct gtccaacca cttcctccta 180
tctgagaacc gctaaggagg gaggcaattt gattatggta attctagcta agacagcaat 240
tttaggggtt gggggctcag tggttctctt ttgttgtaa acagctttcg ag 292

<210> 466
<211> 408
<212> DNA

<213> Homo sapiens

<400> 466

```
gaattcggcc aaagaggcct aggtacagta ggtttataaa cagaagttta aacttatttc 60
tttcatatatt catcaatgtc tgaagaagtt acttatgcag atcttcaatt ccagaactcc 120
agtgagatgg aaaaaatccc agaaattggc aaatttgggg aaaaagcacc tccagctccc 180
tctcatgtat ggcgtccagc agccttgttt ctgactcttc tgtgccttct gttgctcatt 240
ggattgggag tcttggcaag catgtttcac gtaactttga agatagaaat gaaaaaatg 300
aacaaactac aaaacatcag tgaagagctc cagagaaata tttctctaca actgatgagt 360
aacatgaata tctccaacaa gatcagggaac ctctccagca cactcgag 408
```

<210> 467

<211> 487

<212> DNA

<213> Homo sapiens

<400> 467

```
gaattcggcc aaagaggcct aaaaagagaa aaaagaaatt tagaagaata acaagttatt 60
ccaaatgaag gcgtaagaaa gggaataata acaataataa gaggagtgtg tcatgaggaa 120
aaaccaaacg ttgaaaattc acaaaagcca gtgaagctca ttcttgaaaa catgaatcac 180
actcatgaat tctaactaca atgaaaaaga gaaagaaaga gcaggcatgc atttccatat 240
gggagtgaag cagcagacag ccctacagat cgtacacacg ttttccaaaa ctaacaatgg 300
aacaggcggc aaacctatgc caatatacta gaaattgcag attaaataga tgaaatattc 360
taaactggag tttacataat gaacataaga gtaatcagag aacttgactc attttagatg 420
tgtgtgtgtg tgtatatata tgtgtgtgtg tgtgaaaaac attgactata ataaaaataa 480
tctcgag 487
```

<210> 468

<211> 600

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (503)

<400> 468

```
gaattcggcc aaagaggcct aatgatgcaa tagcttgaaa attagttata gtatatcaga 60
ttgatgcact tctgtgaaaa aggtcacact ctatgtctat ttcaaatgc agaccctgca 120
ttttggtaat gttttaaatc cacagagaga cagttagagg atgaaaactg gaaactgaag 180
aataatttta agaattgctaa gctctctgct ttattttatgt aagttacatg acataaaatg 240
tcagggaagt gttttgacta ttactgtaca aaataggaag aaccaactca gtgaacaaat 300
ttgccttctg tttgttgagt cagttatttt acaaaaaaaa ctattgctta ttttcagtag 360
acatttttag ttttccatga atactgaaaa attaaagact ttaagttctg atcatgaaaa 420
acaaacaaat ttatttcacc aaaaatattt tcaacttagt tattattaga taaacatata 480
acttcatata ttaaaatagt agnaaagcaa ggttaatagt atattttatt acattaagca 540
aattaatgta tatatgccat aggcataat atttagaatg ttaattagc actactcgag 600
```

<210> 469

<211> 887

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (367)

<400> 469

```
gaattcggcc aaagaggcct atgctgagtg gaaggaaaca gccagggtggc tgaagtttga 60
agaagatggt gaagatgggg gagaacgctg gagcaagcct tatgtggcaa ccctttcatt 120
```

```

gcacagcctg tttgagctaa ggagctgcct tattaatgga acagtcctcc tggatatgca 180
tgcaaatagc atagaagaaa ttccagacct gatcctggat cagcaagaac tgtccagtga 240
cctgaatgac agcatgaggg tttaaagtgcg ggaagccctt ctcaaaaagc atcatcatca 300
gaatgaaaag aagagaaaca acctcattcc cattgttcgc tcctttgctg aggttggcaa 360
gaagcantct gatcctcatt tgatggataa acatgggtcaa accgtgtctc ctcagtctgt 420
tccaactaca aatccttgaag taaaaaatgg agtgaattgt gaacatagtc ctgtggattt 480
aagcaaggta gaccttcatt tcatgaaaaa aattcctact ggggccgagg cctccaatgt 540
cctgggttga gaggtggata ttttggaccg tccattgtt gcctttgtga ggctgtctcc 600
agctgttctt ctctcaggcc taacagaagt gccaatccca acaagatttt tgtttatctt 660
attgggtcca gtagggaaaag gtcagcagta ccatgagatt ggcagatcca tggccaccat 720
catgacagat gagatttttc atgacgtagc atataaggca aaagagcgag atgatctcct 780
ggcggggatt gatgagttcc tagaccaggt gacggtgctc cctccaggag agtgggatcc 840
ctccattaga attgagccac caaaaaatgt cccttcccag gctcgag 887

```

<210> 470

<211> 488

<212> DNA

<213> Homo sapiens

<400> 470

```

gaattcggcc aaagaggcct acatttccgc acgctattgg gtgcatatt ctgtgtctga 60
ggttacaggc atgccagaac cctcccactg ccaagctggg agatcatttg ttatttctgt 120
agccataggc ttgccaaaac ctggggagct tgattctgaa aggagccatc atgccagagg 180
gcagcaagct ggcgagctgt ggggtggtct caacactcga tatccaagcc ttccagcctg 240
agtgtaacca gagcccctcg gagagaaagt ggccttgagc tgcctcagct gctgtaaaat 300
tcctctaattg gcctagtcta agtccctctc actcaggcca ccgccatttc aatggaaagt 360
gagttgggtc caaataggat gaaccaaact tctgtctgag caaaaaagtt ggcccagggc 420
tcaagagctt taaatggacc atgaataatg ttttacagcc tcggcactgg ggtgaactca 480
accccata 488

```

<210> 471

<211> 471

<212> DNA

<213> Homo sapiens

<400> 471

```

gaattcggcc aaagaggcct ataggcctct ttgggtggtc tctgaaaaaa aaaaaagag 60
taagtgggat ctgtgtgagg agctggtgtg cagtgttctt ggagtaggac tgtcccaga 120
tgagaaaaag ccggccaggc tgtgccagcc tctgcagcct gttttcatct ctacagctgt 180
ttcgtctcgc cagcagagcc cagggatggt accaagtaca ctgtgagagc tgatactgga 240
gttggcagat gccttggggc aggcaccatg cagaacacac agaagtgggg ttagtgaaaa 300
ggtcccttcg aattccattt cgtttccctt aaaaaacaaa aacaaaagcc catactttgc 360
aaagagacag gacgagaaat aagaagttaa agaatttaaa atgtctccct ttttctcaga 420
gccaatgtta aaaaagagcc cagcgctcat tgaatctaga cccaactcga g 471

```

<210> 472

<211> 746

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (177)

<220>

<221> unsure

<222> (242)

<400> 472

```

gaattcgcgg ccgcgtcgac gttaatcgaa agagattatc aggggtgtgc tgactaaacc 60

```

```

agtgagccca tgaaaaggct ctgcccttcc tgaggtcagg gatgttcagg atgagggatt 120
ctgtgctggc ttggaagacg gaggggctat atggtgagga cctgagggag accctangag 180
cagacagcat tctctggcca gcaacagcca gtaaggaaat aaggacgggtg gtcctacaac 240
cnacaaggaa ttgaattctg ccagcaacag aaaatgctgg gaggaggatc ccaagcttca 300
gatgagaacc agccctggct aacgggctga ttccagcctt gtgtgactct ggacacagag 360
cccggttggg tccggcctga cttctgagct agggacctgt gaggttataaa catgtgctat 420
tctgaggggt ccatttgtgg ttttttgtta gacagcagca gaaaactact gcctcctccc 480
tctggctgtg gagatttggc caccttttag gtggcctaag cttaggaagt ggctaagct 540
tagggagtgg cctaagcttc cactttgctt ctattccatt tctctcctt tcccagaggt 600
tttctccttc tctttcttcc catttcttgt acaataaaca ataccactca tttcttctcc 660
tggattattt ccatcagcat acaaacctgc cgcattctac aaatatcttt ccctagtcac 720
tcctcctctt caaggcgcca ctcgag 746

```

<210> 473

<211> 370

<212> DNA

<213> Homo sapiens

<400> 473

```

gaattcgggc ttcattgccta caaaaatttag ctgggtgtgg tggcatgggc ctgtagtccc 60
agctacttgg gaggtcagg caggagaacc gcttgaaccc aggaggtgga ggtttcaggg 120
agctgagatt atgtcactgc actccagcct gagcaacaga gtaagactct gtttaaaaaa 180
aaaaaaaaat taagtgtgct gtcttagtat cttgttatta tgcctaaca gccatacaca 240
acttattaga aggatatacct gtagtgcttg tgttgagtct ctaggcttaa tctaattggct 300
tctttagctg atgatcactt cgtgatggag tgctgtgtgt tgaattactc ctctccccta 360
cttctcagag 370

```

<210> 474

<211> 607

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (136)

<220>

<221> unsure

<222> (359)

<400> 474

```

gaattcgcgg ccgcgtcgac tctgaacatg gcggcggtgg tagctgctac ggcgctgaag 60
ggccgggggg cgagaaatgc ccgcgtcctc cgggggattc tcgcaggagc cacagctaac 120
aaggcttctc ataacnggac ccgggccctg caaagccaca gctccccaga gggcaaggag 180
gaacctgaac ccctatcccc ggagctggaa tacattccca gaaagagggg caagaacccc 240
atgaaagctg tgggactggc ctgggccatc ggcttccctt gtggtatcct cctcttcac 300
ctcaccaagc gggaaagtga caaggaccgt gtgaagcaga tgaaggctcg gcagaacang 360
cggttgtcca acacgggcga gtatgagagc cagaggttca gggcttcctc ccagagtggc 420
ccgtcccctg atgttgggtc tgggggtcag acctgaggag cgctgcgacc ctcttaggct 480
attgactgtt aagtcctcag gtttggtcca gattccagtt cgtgcctctg aggtccacca 540
gagggcgcat gaagcccagg ctgttgccaa accctaccct gccccacacc aaggagccga 600
tctcgag 607

```

<210> 475

<211> 687

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (7)

<220>

<221> unsure

<222> (243)

<400> 475

```

gaattcncgg ccgcgtcgac ggccccagca aggcccatga gtgactgcc tgacgtattc 60
actgtgcctc tgggccactt ctccccctgt agatgtgggc ttgttgctt cagccggctt 120
ccctgaggga ggagaacact ggattattgg aaatgtttta atcactcttg ccattaccta 180
catctattag catagatgat gaaaagctgt tactgggtgat tatagatgag tatttccagg 240
acnacattct aaaagtacaa ttatttctta ttggggagat tacaggtagt ttggcaaagc 300
attgaagtac aaaggtacat tttcaattaa aaagcacact tctacaaaag atttggtttt 360
taaattatgg ttacacattt cagtaactca tagctgctgt gcaaatgggt agaccttata 420
agaaggcact tgtttgtaag ccagagaaga aactttaatt gcatcctatc agattgttga 480
ggtgggtgtg atagtcttca ggtgcagtgc gttcattcac taacgctcac tgtcagtgcc 540
catgtttgct agctgcctcc atgtgactag tgagctgctg gtgaaagtcg tgtgaaatcc 600
tgtacactgt gtatagaaca atgtaatttt atgttaattg ttattacttt aaaacatata 660
taccatctga ttggctggta actcgag                                     687

```

<210> 476

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (126)

<400> 476

```

gaattcgcgg ccgcgtcgac cggaggttgc agtgagccga gatcacacca ctgcactcca 60
gcttggggcga cagagtgaga ctctgtctca aaaaggaaat atcagagttg agaatagaag 120
gatgtngcat ggaaagtggg acagatgatg tttttgttgt cacaataaag gggagctaaa 180
ccttggcctg agcccttgtg agagggagta cagagctgaa ttgtgtggat aacttacatt 240
ttaggcagag ggttgagaaa taccatttta gctacataga gtaagttaaa agttcagagg 300
tttttccgtc tctggcgtcc aaggtgtaat gaattccttg gactgtactg agacctgcag 360
aagaacagac aggagccagt tgttcagaat catgaaaaat caagaaggct gtgattgaat 420
ggagtgtaaa cccacatttc ccttggaatg caggtccaag ataatgtgc tgcaacaaag 480
caaaatgtgt ggcaattttc atactgaagt tgaaccctgt tggggaggga gagtgggagc 540
tcgag                                     545

```

<210> 477

<211> 773

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (219)

<400> 477

```

gaattcggcc aaagaggcct acgagagccg aaggaggctg tgggaggtgt tggcggcgcc 60
ggcgcgggcg cctgaggagg aggaggagaa gcgatgaga tcgtggggct caccagcgct 120
ccccatggct tctgagtgc gtgggagtg agtcagcacc aagccaggct ccccgccct 180
gccttgccct cactgctcc tgctctctgc cagaggcana tgggtccgag ggcaccatgg 240
ggccccgaga gtgacagcac gagaactgtg cgagaacgac gacctggcca ccagcctcgt 300
cctggacccc tacctcggtt tccgcaccca taagatgaac gtcaggctta tcgctacctc 360
cgtgccttcc tgccggaaa tggttttacc atcctgccct gcacgcgcta ctccatggag 420
accaacgggg ccaagatcgt gtccactcgt gcttggaaaa agaatagaaa gctggagctg 480
ctggtgggct gcattgcaga gctgcgggag gcagatgagg ggctgctgag ggccggtgag 540

```

```

aatgacttca gcatcatgta ctcaaccgcg aagcggagtg ctcagctgtg gctgggcccc 600
gccgccttca tcaaccatga ctgcaaacc aactgcaagt ttgtgcctgc agatgggaac 660
gcagcctgcg tgaagggtgct ccgggacatt gagcctgggg acgaggtgac atgcttctac 720
ggcgagggct ttttcggcga gaagaatgag cactgtgaat ggcacacctc gag 773

```

<210> 478
 <211> 517
 <212> DNA
 <213> Homo sapiens

```

<400> 478
gaattcgcgg ccgcgtcgac gagagttctt gctcttctgtg taccagatac tctttttctt 60
ctactcctct tcagagagtc ctgaactatg cttttataac caaccacagt gtttctaact 120
gtgaattatg attgcatatg cctctaccac ggtgcttacc acactacatc ataaatattc 180
atttgacctt tgtctccatt ctaggtagca aactctttca acataagaat tttatctaag 240
cactcttcac tttatgcctt tgccagtcaa cactatcctg atgttaacat ccatatgatg 300
taatcaatat tcagtcaaca aatatctgga gtagatagcc attgtacccc aaagtaaadc 360
atatgagccc tacttttaag aaatccaagc tgtcactgga ataaaaatga tgtttcatca 420
tcacaaaagt aattattgca taaagaagcc ccatactctg gcattccactt tacaaaaata 480
aaaaatcagg gaaaggatga atcgctcatgg actcgag 517

```

<210> 479
 <211> 202
 <212> DNA
 <213> Homo sapiens

```

<400> 479
gaattcgcgg ccgcgtcgac atcattttta tgaaatgcct ttgtactact cctgtgtagt 60
catcatgtcc tccttcagc ctccaccacc aatcaaccaa ccaactttta tcctggcagc 120
taccagttgt ctgaatttta tcactttcgc tataatttta tctttctcag aatgtcataa 180
tacagtagcc ccgtactcg ag 202

```

<210> 480
 <211> 243
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (19)

<220>
 <221> unsure
 <222> (98)

<220>
 <221> unsure
 <222> (208)

```

<400> 480
gaattcggcc aaagatgcnt aatgctctca taccagtga aacagactgg tcaacttagt 60
ttttttgttt tgtgttttct ttttcttttt ttttttnac acgttttggt acacgagaac 120
gatgggtagg ccccatctgg ggtcttgggg agaaaagcaa gttccccgat ttattgaatg 180
ttccctgttt gcattcccga tgctcgangc aggtccgctg attgaattct agcactcctc 240
gag 243

```

<210> 481
 <211> 900
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (692)

<220>
 <221> unsure
 <222> (727)

<220>
 <221> unsure
 <222> (865)

<400> 481
 gaattcggcg ccgcgtcgac cgattgaatt ctagaccagc cttgctccca gctcaccac 60
 aagatgtgga cagctcttgt gctcatttgg attttctcct tgtccttata tgaaagccat 120
 gcggcatcca acgatccacg caactttgtc cctaacaaaa tgtggaaggg attagtcaag 180
 aggaatgcat ctgtggaaac agttgataat aaaacgtctg aggatgtaac catggcagca 240
 gcttctcctg tcacattgac caaagggaact tcggcagccc acctcaactc tatggaagtc 300
 acaacagagg acacaagcag gacagatgtg agtgaaccag caacttcagg agttgcagct 360
 gatggtgtga cctccattgc tcccacggct gtggcctcca gtacgactgc ggctccatt 420
 acgactgcgg cctccagtat gactgtggcc tccagtgtc ccacgactgc agcctccagt 480
 acaactgtgg cctccattgc tcccacgact gcagcctcca gtatgactgc ggctccagc 540
 actcccatga cacttgcaact ccccgcgccc acgtccactt ccacagggcg gaccccgctc 600
 actaccgcca ctgggcatcc atctctcagc acagccctcg cacaagtgcc aaagagcagc 660
 gcgttgccaa gaacagcaac cctggccaca tnggccacac gtgctcagac tgtagcgacc 720
 acagcanaca caagcagccc catgagcact cgtccaagtc cttccaagca catgccagc 780
 gacaccgchg caagccctgt accccctatg cgtccccaag cacaaggctc cattagccag 840
 gtgtcagtg accagcctgt ggttnacaca acaataaat ccacacccat gaccctcgag 900

<210> 482
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 482
 gaattcggcc aaagaggcct atcaaaacta accctttcct ctgacttctt agtcaaagaa 60
 catacacttt agctaatacc ccaagacaga agttctttgg tgctgagagt caacgagagt 120
 cacattctcc ttgaaaaggg aagggaagct ctatacctgg ataactgcgc agatccatgg 180
 ccccatagca caaaattcgg gcaactgaga acccagctgg ccccagctg gtaattcctc 240
 aacattctgg tgtgtcctaa cattgccaaa taggctggaa ggatttagag aacagggaag 300
 aagctactgg gagataaggc tgcagctgtg aattatagac agggaaggct cgag 354

<210> 483
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 483
 gaattcggcc aaaggcctac tctgtgaact tctactactg aaagcaacaa aggcagtcgg 60
 cataaaaaatg ggttctctca gcacagctaa cgttgaattt tgccttgatg tggtcaaaga 120
 gctgaacagt aacaacatag gagataacat cttcttttct tcgctgagtc tgctttatgc 180
 tctaagcatg gtctctcctg gtgccagggg agagactgca gagcaattgg agaagggtgt 240
 tcattttagt catactgtag actcattaaa accagggttc aaggactcac ctaagtgcag 300
 ccaagctgga agaattcatt ccgagtttgg tgtcgaattc tctcaaatca accagccaga 360
 ctctaactgt accctcagca ttgccaacag gctctacggg acaaagacga tggcatttca 420
 tcagcaatat ttaagctgtt ctgagaaatg gtatcaagcc aggttgcaaa ctgtggattt 480
 tgaacagtct acagaagaaa cgaggaaaat gattaatgct tgggttgaaa ataaaactaa 540
 tggaaaagtc gcaaatctct ttggaaagag cacaattgac ccttcactctg taatggctcct 600
 ggtgaatacc atatatttca aaggactcga g 631

<210> 484
 <211> 487
 <212> DNA
 <213> Homo sapiens

<400> 484
 gaattcggcc aaagaggcct aagggcattc cagaaagatg aggatatttg ctgtctttat 60
 attcatgacc tactggcatt tgctgaacgc atttactgtc acgggtccca aggacctata 120
 tgtggtagag tatggtagca atatgacaat tgaatgcaaa ttcccagtag aaaaacaatt 180
 agacctggct gcactaattg tctattggga aatggaggat aagaacatta ttcaatttgt 240
 gcatggagag gaagacctga aggttcagca tagtagctac agacagaggg cccggctgtt 300
 gaaggaccag ctctccctgg gaaatgctgc acttcagatc acagatgtga aattgcagga 360
 tgcaggggtg taccgctgca tgatcagcta tgggtgggcc gactacaagc gaattactgt 420
 gaaagtcaat gccccatata acaaaatcaa ccaaagaatt ttggttgtgg atccagtcac 480
 actcgag 487

<210> 485
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 485
 gaattcggcc aaagaggcct acacgtaata aaaaacatgg gcttcaacct gactttccac 60
 ctttcttaca aattccgatt actgttgctg ttgactttgt gcctgacagt ggttgggtgg 120
 gccaccagta actacttcgt ggggtgccatt caagagattc ctaaagcaaa ggagtccatg 180
 gctaatttcc ataagacctg cattttgggg aagggaaaaa ctctgactaa tgaagcatcc 240
 acgaagaagg tagaacttga caactgccct tctgtgtctc cttacctcag aggccagagc 300
 aagctcattt tcaaaccaga tctcactttg gaagaggtac aggcagaaaa tcccaaagtg 360
 tccagaggcc ggtatcgccc tcaggaatgt aaagctttac agaggggtcgc catcctcgtt 420
 ccccaccgga acagagagaa acacctgatg tacctgctgg aacatctgca tcccttctctg 480
 cagaggcagc agctggatta tggcatctac gtcatccacc aggctgaagg taaaaagttt 540
 aatcgaacca aactcgag 558

<210> 486
 <211> 971
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (11)

<220>
 <221> unsure
 <222> (83)

<220>
 <221> unsure
 <222> (364)

<220>
 <221> unsure
 <222> (387)

<220>
 <221> unsure
 <222> (445)

<220>
 <221> unsure

<222> (546)

<400> 486

```

gaattcggcc naagaggcct actacttgcc cctcgttcc ttccccagcc ctttagagaa 60
gggaccatga tttggaaacg cancgccgtt ctccgcttct acagtgtctg cgggctcctg 120
ctacaaggca gccaaaggga gtttccacta acacagaatg taaccgttgt tgaagggtga 180
actgcaattt tgacctgcag ggttgatcaa aatgataaca cctccctcca gtggtcaaat 240
ccagctcaac agactctgta ctttgacgac aagaaagctt taagggacaa taggatcgag 300
ctgggttcgag cttcctggca tgaattgagt attagtgtca gtgatgtgtc tctctctgat 360
gaangacagt acacctgttc tttattnaca atgcctgtca aaacttccaa ggcataatctc 420
accgttcttg tgttcctgaa aagcntcaga ttagtggatt ctcatcacca gttatggagg 480
gtgacttgat gcagctgact tgcaaaacat ctggtagtaa acctgcagct gatataagat 540
ggttcncaaa tgacaaagag attaaagatg taaaatattt aaaagaagag gatgcaaatc 600
gcaagacatt cactgtcagc agcacactgg acttccgagt ggaccggagt gatgatggag 660
tggcgggtcat ctgcagagta gatcacgaat ccttcaatgc caccctcag gtagccatgc 720
aggtgctaga aatacactat acaccatcag ttaagattat accatcgact ctttttccac 780
aagaaggaca gcctttaatt ttgacttgtg aatccaaagg aaaaccactg ccagaacctg 840
ttttgtggac aaaggatggc ggagaattac cagatcctga ccgaatggtt gtgagtggta 900
gggagctaaa cattcttttc ctgaacaaaa cggataatgg tacatatcga tgtgaagcca 960
caaacctcga g 971

```

<210> 487

<211> 833

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (111)

<220>

<221> unsure

<222> (399)

<400> 487

```

gaattcggcc aaagaggcct aagaaagtga aaaggggaaga aagatgtata cataaaaaata 60
cgaatggatt ctggaatttt tagtctagta cagactctct aaattgagtc nggatctaga 120
gaaagtttag aattcttaact gtagattatt ttacatttag gacagtgaag agtggacact 180
ttaaaaatag ctacttacat gctttgaaag gagctcagat aaaatatttg catgttcatt 240
gaacattctt cattaggctc cagtgggac atgttactat gctgtgagta tctggcatgg 300
aagatgttat catataatat gagacacagg aaaataatgg tctacttaat tgctgtttaa 360
gtatgattac acgtatttgt agttgtatga tgtcatgtng aacaaacatt tgtagacaa 420
gagattaaag tccgttggtg aaatctgatt ttgccaaagag atggggaaag tacaagtatg 480
gccatctcct ttcactgtgt cccttctcag ataacctgtg aaaaagaagc tgagatagta 540
tgatagtgtc ttatttttgg aggtggattt ctggaaagtt ctgtcttctg gtgtgtgtat 600
gtatttgttt ttaaattata agagtaatgc tcattgaaga aaacttgtaa aatagaaaaa 660
atagaaatat aaattatgca taatctcaca ccagaaata actattgtta atgttttggc 720
atatttctgt ttgttttttg tttttttgag acagagtcct actctggtgc ccaggctgaa 780
gtgcagtggg gcgatcttgg ctcactgcaa cctctgtctc ccgggtactc gag 833

```

<210> 488

<211> 522

<212> DNA

<213> Homo sapiens

<400> 488

```

gaattcggcc aaagaggcct agcaatcgct tacaggaagt tttgaatgac tactataaag 60
agaaggcaga gaattgtgta aaattgaata cccttgaacc cttggaggat caagacctgc 120
caatgaatga gcttgatgag tctgaggagg aagaaatgat tactgtagtc cttgaagaag 180
ccaaagagaa gtgggattgt gaatctattt gtagtacata ctcaaattta tataaccatc 240

```

```

cacagcttat caagtatcaa ccaaagccca aacaaattcg aatatcttct aaaacaggaa 300
tacctctcaa tgtcttacca aagaaaggac tcacagcaaa gcaactgaa agaatacaga 360
tgattaatgg cagtgatctt cctaaagtat caactcagcc acgttctaaa aatgaaagca 420
aagaagataa aagagcaaga aagcaagcta taaaagaaga gcgcaaggaa cgaagagtgg 480
agaagaaagc taacaaatta gcatttaagc tggagactcg ag 522

```

<210> 489

<211> 643

<212> DNA

<213> Homo sapiens

<400> 489

```

gaattcggcc aaagaggcct acatattctc cgtagtcaca gtttcagaac tgagtaagga 60
tccttggttac ttggtggcat ctgttgaact gaggagcatt tctcattgta aagattgcct 120
ttgttctgtc taaaagtctg gagaaatccc aaagactttt cctatgtact aggcatttta 180
ttttgattga cttacaaact cttcttaatc attatcaatc tcgggttttt tgtggtgcag 240
tggaaggaga aatagggtcta gtttctgcct ctgattagcc gcacagcctt gaacaaatca 300
catttcattc ttgaacttac ctctactgtt agactaggcg actcacattt gaggactttt 360
ctcgggtatc ttgagggttt gtgatcctga acccttaaac agtgcttttt tgttacacag 420
gagggctttt ttggggggat gaccagtaca gacatgccag ttagttttac tagtgggac 480
ccaaatccaa agcagtgtag tgggtgattg tcagtgacta accaggcagc taagaagtct 540
taggcagcag ccagacatg tatagagggg cagtttaggg gagaacaggg gtgggaaagg 600
gagcaagggg cagatagctc agcaaggaaa gaatcggtc gag 643

```

<210> 490

<211> 434

<212> DNA

<213> Homo sapiens

<400> 490

```

gaattcggcc aaagaggcct aggggactgg agaatggcca tgccaagtgg cctgtataaa 60
aagtaaccga agtcatgggg ccagagtgcg atttttctga atgaaccaca aatggcatgc 120
tgttgattga aaaccactga agacaggaag aagaggaaca ggcagttaga aggttagcac 180
aaaaatcagg cattggcttg gcttctgcc a ttggtgagac tccattcaa tgattcaca 240
tagccctcgg gctggccacc aaaactgtct ccttatttct ctccatgctg acctcctcct 300
cccctcagcc actgctcatt ccctcttctc ccagacacga aaattttagg tcgcttttcc 360
tcattcctct acactgtcct aagcctcagt agtagtcttc ttcttatctc tcccggagtg 420
ggggctggct cgag 434

```

<210> 491

<211> 218

<212> DNA

<213> Homo sapiens

<400> 491

```

gaattcgcgg ccgcgtcgac caagtttctt cctgcataga gtggggtagt gattacctct 60
aggattgtga aggtggggag agaatgcgta taaagatgct gcttcccagt ctagtactgt 120
tttctgttct gtttgccagt ctagtgaatt gctcgatgac cagccaccac tctccctcat 180
tgcaagggca gataggagtg agctggctct ttctcgag 218

```

<210> 492

<211> 693

<212> DNA

<213> Homo sapiens

<400> 492

```

gaattcggcc aaagaggcct aaaagtaact tcaaaattta aaatactaga acgtttgctg 60
cgataaatct ttggtatttt tgtgttttct taatgagaat actgttttct attacctaaa 120
gaacaatttg ctaaactatg gaaatcactc actttgatta tgtatagatt acataggaag 180
aacaatcaca tcagtaagtt atagtttata tttaaaggtaa ttttctgttg gtcataaca 240

```

```

aatataccag cattcatgat agcatttcag cattttccaa ggtaccaagt gtacttattt 300
tgtgtgtgtt gttgtgtgtt tatttttagaa ggaattcagc tctgatgttt ttaaagaaaa 360
ccagcatctc tgatgttgca acatacgtgt aaaatgggtg ttacatctat cctgccattt 420
aaccgccacag ttaataaaagt ggctgaaaat aatagtagct ctggcttggt gcttgacctg 480
gttaaatact gtcttaaagc tcatacaaaa caaataggct tttccataag tggcctttaa 540
gaaaacatgg aagacaattc atgtttgaca aatgctgaca ggggtgaagaa agcccagtgt 600
aaaaatgaat cgcgttttaa gtgattcggg taaagagttt gggctcccgt agcaaaactaa 660
tactagataa taaggaaatg ggggactctc gag 693

```

<210> 493
 <211> 228
 <212> DNA
 <213> Homo sapiens

```

<400> 493
gaattcgcgg ccgcgtcgac ttttaagcta tttgtctggt aagtatataa taccaaaacg 60
cagggtgttt aaattaggat ttccaagtaa ttacgtcgt cttcaaaatt cctgggggtct 120
atcaatcaga aacgccagaa agtttgtgta ctagtctcac attgttaagg gagtatctat 180
aataaaattc aaatgcgtta ttttaaaata agtaaaggac ttctcgag 228

```

<210> 494
 <211> 230
 <212> DNA
 <213> Homo sapiens

```

<400> 494
gaattcggcc aaagaggcct aattgtaaag aaaaggctta cagaatattt aaatcgatg 60
gttaatttta tgttcataaa gttttatttt ttgttacttc atggaatata tttcccggt 120
cagaagacta gaagtttcgg gccgggcgtg gtggctcgcg cctgtagtct tgaactctg 180
acctcgggtg atccccccac ctccgctccc ggagtggggg gatcctcgag 230

```

<210> 495
 <211> 135
 <212> DNA
 <213> Homo sapiens

```

<400> 495
gaattcgcgg ccgcgtcgac aaaaatgggt atatcccttt atattgtatt aatgtcatgt 60
ctagtaatcg atcctaaaga aataaccagt cagccggcac agtgggtcac acctgtaatc 120
ccagcacgtc tcgag 135

```

<210> 496
 <211> 522
 <212> DNA
 <213> Homo sapiens

```

<400> 496
gaattcggcc aaagaggcct ataggccgtg aatgattaaa taaaagtcta agttcaccgg 60
agcctggata aaataaaact caaagcccag aaacttcaaa taaaataaga aaaaatcata 120
atttttcacc tcaaaaaggaa actgagaaga gaagtatgat gtgacagaaa ctatgatttc 180
aaatggaggg tttcttttgt tgtttgtttt tcagaactag actcacattt tacaaaaggc 240
tcctaccca taaggaagaa agttttgaga gtaatgaggt tgatctgaac tgttaaaaac 300
tttctaactg agatatagca acatatgggt tggcagaata aaaaatggcca caaaatcttt 360
aacattcctt ccattccagaa gtgaggggtc tatgttcctt ctccctgagt aagggtgggc 420
cactgagtat tttcactaag agaattcagc agaggctggg tgcggtggct catgcctgta 480
atcccagcac tttaggaggc caatgcagca ggatcactcg ag 522

```

<210> 497
 <211> 493
 <212> DNA

<213> Homo sapiens

<400> 497

```

gaattcgcgg cgcgctcgac gtgggttcat ctgtggcact ggaatcagca gtcattcttc 60
aaatctgaga tccctaaatc cactgtcttg attgttcttt tgccagttgt caacaagccc 120
ttctcaaatt cttcttcagt tattttgcct ttcttaagtt ttttcaagag tcttgtgtca 180
ttaagaagtt cttccatgtc ctcatcttca atatcagaac cctcttccct tttccttttc 240
tcattcattt ttttcttctt ttcttttttg gccttctgct ttgaccaagc tttatttttt 300
atgaattttc ttctcccttc attttctggt ttctctcttc tttgttgctc caggagtttc 360
tgccctgctt ttctctgcat tttatcttta aatggaatcg tgtcggtatt aacgtccacg 420
ggcacaaaat ctggaaactg ctttctcttc aattctggca tcttgggcat cctcagcagg 480
gcaaaacctc gag 493

```

<210> 498

<211> 202

<212> DNA

<213> Homo sapiens

<400> 498

```

gaattcgcgg cgcgctcgac cccaggtctg tatggagggg caccacggct tttttgtttt 60
ttgtttgttt gtttttaatc tcagccttgg cgtgagctgg ggcccttctc tcttctccag 120
cctctccctt tcactcttca cccagcatcc tgccccctg tccaaaaaca gcaggacatc 180
agaccatcc catcacctcg ag 202

```

<210> 499

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (12)

<400> 499

```

gaattcgcgg cngcgtcgac ccctctccag atattcaggt gagaatcaga agccagccat 60
cacctttact ttgagaaatc tgggctctga gcgtcttgca tctgaatttc cccaggcct 120
ctcatgccat ccattccctt tgagagcttc ctcccgttc gatcactgat tctacctgct 180
ctccagggcg ctctggcttc ctcggggagc tgggtctcag atcccaggcg ctgggtgccac 240
ctcagggttg caccaggctt gggaaaaggg tttcctgcct tgccctggtt tcacctttgc 300
agaggggaagg cacttgggcc agttgctagt ctcacctcc tccctctttg ctgttcatca 360
tagtggcttt tccacgttct ggccactctc gag 393

```

<210> 500

<211> 145

<212> DNA

<213> Homo sapiens

<400> 500

```

gaattcgcgg cgcgctcgac atttattaat gcatatattt cccctgcttg ttgtacaagt 60
aagtactctt tttcctttaa tctgtaagat tcatgaaatt cggggccagg gaaacagttt 120
agccttaggg aagggaacac tcgag 145

```

<210> 501

<211> 182

<212> DNA

<213> Homo sapiens

<400> 501

```

gaattcgcgg cgcgctcgac tgggctgtcc ttgggtgtct tgctcttctc agagaacagt 60
ggtagggagg gcagctcaga ttctgaactc agggacagtc ggagcacctc ccgaggcact 120

```

gaggaagacc tggctcgctg ccttcctgga gggacaatct gctcttcacc tctaacctcg 180
ag 182

<210> 502
<211> 378
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (346)

<400> 502
gaatttcgac aagaggtggt atctggaaga ttaataagtg ttcaatttaa aacattcagt 60
aagcttgctc tgtattcctg cacgaagagt agaacagcaa tatattccat aaaagtaaag 120
caaaataaag ttattccaag taaactaaat tagaaggctt tttatgaact gggcaactgt 180
tggaactaag ctgggtatggg gttgttagct gattgtaatg tgcccagcat tagaatacta 240
atccagattt ttataattacc catccttctt gtttcttctg agcagcagtc agagatcact 300
ggttggttca caggaataag caggattagc ctaaattgca gaaacnaact taaaacaaca 360
gtaggccatg aaggccga 378

<210> 503
<211> 427
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (59)..(60)

<220>
<221> unsure
<222> (166)

<400> 503
gaattcggcc ttcattggcct accagaacat gcatatgctt cttcttagtt tatcagttnn 60
atacacagca gtctttgact ctcttttga aggaggtgcc tcatecttcc ttcagccact 120
ccccactcca tctccccac cccctcatc ctgcacctgc tttctngtgg cctgcatttg 180
gtacatttgc attctgctca gtaggcacag taacgtctca ccactttggc tgggtgtctga 240
cacctgcagg tttccagcac tgccacctgg gggctcttcta accacagagc agatcatgcc 300
cctcctgctg gcgcttctc aatactccaa ggagagcatt cgggctcctg ggtttggtat 360
gaaaccctt tgcaatcggg gccagcccat gtgtgcagct tcctcactag tcaactccaca 420
actcgag 427

<210> 504
<211> 270
<212> DNA
<213> Homo sapiens

<400> 504
gtaggccatg aaggccggcc ttcattggcct acagttagtg tctccatctg ggcaagagac 60
aacatgtgaa agtctcattt atgctggaag atagggtagg gttgagagtg atggttacaa 120
gcatttttaac ttacatctca caagagtgtg gtacagatta agtccttgat aatcatgttg 180
tatattttaaa aacatctata gatgatttta tgtagaatgg gaattttaac attttaaatg 240
tgtttatttc tttggtgggg aaaactcgag 270

<210> 505
<211> 335
<212> DNA
<213> Homo sapiens

<400> 505
 gaattcggcc ttcattggcct agtcctttca ggtaagtatt attactatta tgcccattgt 60
 acagatggga aaattaaact cacgtagtta ggataaataa cccccaagt tcacatagct 120
 gctaagtggg tgaatgaga tttgaattta ggcagaggat tccagagtgt gttctctttg 180
 acatatgggc ataaccatct ttcattgtca ataaatatag acttcacctg tacttgatt 240
 ggctgtatag tatttcactt tcattctcact caaactctta gtaattattca catatcttca 300
 tttcttgaaa ggattttttc ttacagtgc tcgag 335

<210> 506
 <211> 317
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (293)

<400> 506
 gaattcggcc ttcattggcct acacaaacta tgcattcctc acagcctcag ggaacttatg 60
 cctctccacc tcccatgtca cccatgaaag caatgagtaa tccagcaggc actcctcctc 120
 cacaagtccag gccgggaagt gctgggatac caatggaagt tggcagttat ccaaatatgc 180
 cccatcctca gccatctcac cagccccctg gtgccatggg aatcggacag aggaatatgg 240
 gcccagaaa catgcagcag tctcgtccat ttataggcat gtctcggca ccnagggaat 300
 tgactggagt actcgag 317

<210> 507
 <211> 546
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (173)

<220>
 <221> unsure
 <222> (250)

<220>
 <221> unsure
 <222> (292)

<400> 507
 gcgattgaat tctagacctg cttcgtgtgc aaccctcacc atcctccac tccagaactc 60
 ttagttgttg taaaactgga actctgtacc cactaaaca cagcaaccac tgttctactg 120
 cctgtctctg cgattttgac tactctaggt accacatata agtggaaatc tanagtactt 180
 gtgtttttgc ggccacaggg ttttatttat tttcttttct ccacctccag aatccccgcg 240
 ttctgtccn ggctggtttt gcttctctg ggtcgtggg tgctatttg angtgggtga 300
 ggagccctct cccatccat cctgcttggt tttctctct ggtgctaac tggcctctac 360
 ctttgtctct gtctcctct cctctgctct tggtagctg acggtaggga aagtgtccag 420
 cggaataggg gctgcagctg aagtcctggt caatctgtac atgaatgat acagacctaa 480
 ggcccaggcc acctctccag acctggtaag gacatgcacc cccagcctc acccacagct 540
 ctcgag 546

<210> 508
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 508


```

gaattcggcc ttcattggcct acatctttct aactcaagga atgggtgctga ttttttaa 60
gtttgacacc aggccttggt tttccagctg agcattctca ttttgctttt ctctaagact 120
atcaaagaca aggtattaat agtaggatta ttcctagatc agaattgttc atacattcct 180
aaagggttat gtggaattg gcttaggaaa actttgagta gcagagactg aggatgagt 240
ctagagatga aatcaggaca gatttggtgc agttaattct tgccaagcaa attagtggta 300
aatgtcacat tgttatgtga attgagcaca tttttttaa gaaagtttac aaaaaattt 360
tagaaccaca catctcgag 379

```

<210> 509

<211> 376

<212> DNA

<213> Homo sapiens

<400> 509

```

gaattcggcc aaagaggcct acttggtttt gataccttac tggacagtgt atttccaaat 60
gcagacaaca tatgttttac agagtcttca tttgaggatt ccagaaattt caaatattac 120
aaccactcct cacacgtccc ctgcagcctg gctgaccatg tttgatgctg tgcctatcct 180
cctgctcatc cctctgaagg acaaaactggt cgatcccatc ttgagaagac atggcctgct 240
cccactctcc ctgaagagga tcgccgtggg catgttcttt gtcattgtgct cagcctttgc 300
tgcagggaatt ttggagagta aaaggctgaa ccttggttaa gagaaaacca ttaatcagac 360
catcggcacc gtcgag 376

```

<210> 510

<211> 439

<212> DNA

<213> Homo sapiens

<400> 510

```

gaattcggcc aaagaggcct acaagttcaa caattccagg aaatatattt ctatcactgt 60
gccatccaaa acccaacaa tgaccaccaca catcaagtca gttgacgacg ttgtgggtact 120
tggtcatgaat ctgagcaagt ttaacaaact tactcagttt ttcattatgtg ttgctggagt 180
ttttgtattt tacctaattt atgggtattt acaggaatta atattttcag tggagggttt 240
taagtccgtg ggtcgggtacc ttaccttagt gcagtttgcc tttactcca tatttggcct 300
aatagaactt cagcttattc aggacaaaag gaggagaata ccaggaaaaa cctacatgat 360
aatagctttt ctaactgtgg gtactatggg gttatcaaac acttcccttg gctacctgaa 420
ttaccctacc caagtcgag 439

```

<210> 511

<211> 289

<212> DNA

<213> Homo sapiens

<400> 511

```

gaattcggcc ttcattggcct actttaaatg ccctagctat tcccagaggg gtttttttgt 60
ttgttttttt gggttttgatt ttctttttgt tttctttct tcttcttatt tttttcattt 120
gagtccttagc tcccatttaa gttatgcttc tgaccttgta tggctgtgaa gcttgcccag 180
aaataagacc actgttttga actaccacaa aagtataaat gaatatattt atgccacaat 240
ctttcctggt gcctgtggag tctctgctga aatgaatcag gagctcgag 289

```

<210> 512

<211> 577

<212> DNA

<213> Homo sapiens

<400> 512

```

gtttcccaa gtcattagttc agcagacggg gagtttgccc agtttttctt gccttgactt 60
ttttctctct gttcagcaaa tttcactgga tttccagctg ctgtgtcata atccctaggt 120
acagctgttc tgtctctgcc aaagctgttg cttgcagggc tcccatttga gctgccatag 180
ctatctgagt tactggcatt cctgatgcca acagggcagc aacattgaga acaaaatctc 240
tagtaactgg agctatttct tgtttttgtt tttcaatgat tttttttctt tttaaaaaat 300

```

```

tttttcccaa caccatccc aactatttct ttttcttgct gttcttgtaa tttctttgcc 360
tagtccatcc tcccagctaa agcttcttat gcatcctttg ctgtgcctct gcctctgaag 420
agagatgaac tggaaatctg gcttaaacct ctgctaaatc ttagtttctc aatgctcttc 480
tttctctctt gtcttctgct tcctgtacta cttctgcttc tttcttatgc atgtcatatt 540
tatttattta cttatttttc acacgcaaac actcgag 577

```

<210> 513
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 513
gtcaggggcg tctgcgtcat tctccagtga atctgagagg ggctaatacc aagggtcacgc 60
tattcccagg aacttctagc ccagctggga ataaccatca actaccata tctaattctt 120
ggttaacaaa taccttccac agtcttcatt agcaaatgtc cttcttgctc gctgcaagga 180
gagccaacat tctcatttaag tcctcggttc tcctgttaac tgtttacatg actgtccttc 240
agcacgtaca cggttcagcc tcagctacag accatcactg ctacagagcg acaacttccc 300
attcggactt aggcagtgtt tcagttcatt acagagaagt ggttttcctc gag 353

```

<210> 514
 <211> 180
 <212> DNA
 <213> Homo sapiens

```

<400> 514
gaattcggcc ttcattggcct agtctttctg gaaatgagtg tcctcaactg cttgtctaaa 60
aaattaacat tagctttctc cttttcttc ctttttgaga tagggctcgc ctctgttgcc 120
caggctggag tgcagtggca cgatcctggc tcgctgcaac ctccacctcc cagactcgag 180

```

<210> 515
 <211> 308
 <212> DNA
 <213> Homo sapiens

```

<400> 515
gcgattgaat tctagacctg cctcgagtct tgaccagcta cgtattccac tgaccagcct 60
catcatctct gccctcaaca gtggaaatga tctctttccc acagatgttc tccctccctc 120
cttccttccc tcccccttc tacaacgtg aactcttaag tctttactct ctggcttca 180
gaagggtttg gttacaagca gtcttcccat ttaatttggt gctctgcctt ttaaaattgt 240
tttttgctct ttgttggtca gagaacgacc agagtatttt ctccccagtg tgtcccagca 300
gactcgag 308

```

<210> 516
 <211> 305
 <212> DNA
 <213> Homo sapiens

```

<400> 516
gaattcggcc aaagaggcct agtcgttaat aaatcacatc ctagtctttc agcgcttccg 60
taagcagacg acatcttcag tttctagct cttgtagttt caaactgca acatcaatga 120
tgcatatgtc cagaatcagt tacaagacc atccgattct tttctctta gttcatctat 180
ttttcactgt ctcttggtcc caagtgtatc tgagtgatta ccttctggca ttctctgcta 240
ttgctcgttg ggggtgcttc gattgtcccc gtgttttggt ggctggttgg gagagggcgc 300
tcgag 305

```

<210> 517
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 517

```

gaattcggcc aaagaggcct acgtcaaata tctcggcaag gtcttgccga ttctgtgtga 60
tgcacccact tcggacgctc ctgaggtcgt cagaaatgag gaagttgttg gctgtgtcgg 120
catccaaagt cgtatccact gtgaaaagga aaaaaagtgt atcagaaaat ggacagaagc 180
caaccccatg cctctcctct acttcaaagg cccaaatata tcttgacttt gggtttcttta 240
attctcttct tccccaaaa tcaaaacttt tcatgaggct actcgag 287

```

<210> 518

<211> 390

<212> DNA

<213> Homo sapiens

<400> 518

```

gaattgccaa cagaggccta gctgatgttt gctgtgaccc acatgttcta cgctccgcc 60
tttggcatgc agccactggc tcttcggaca ggtctggtga tcgcatcgct gtcgggcttg 120
tgctatgccc tcctctaccc atgcctctca ggtgccttca cctacctggt gggggtctat 180
gtggccctta tcggcttcat gggctggcga gctatggcag ggctgaggct ggccggggca 240
gactggcgct ggacagagct ggcagctggc agtgggtgcac tcttctttat catctcagac 300
ctgaccatcg ccctcaacaa attctgtttt cctgtgccct actctcgggc gcttatcatg 360
tccacctact atgtgaccca gatgctcgag 390

```

<210> 519

<211> 376

<212> DNA

<213> Homo sapiens

<400> 519

```

gaattcggcc ttcattggcct actcagtata tatggaggca gaagcaacag ctctgctctc 60
tgacacatct ttgaaaggct agcctgaggt acctgcacaa ctctggatg cagaagggtg 120
tatcaaaata ggctctgaaa aatctctgca ccttgaagtg gagatcactt caatagtctc 180
tgacaatact gggcaggagg agtctgggga aaactctgta cccagaggaga tggaaaggca 240
acctgtgctc tctggggaag ctgcagaagc agtgcactca ggtacatctg taaagtcac 300
tagtggcccc ttccctcctg ctccagaagg ccttactgca ccagaaattg aaccagaagg 360
ggaaggccaa ctcgag 376

```

<210> 520

<211> 334

<212> DNA

<213> Homo sapiens

<400> 520

```

gaattcggcc ttcattggcct acaccctgtt aaccgtgacc ccgagcaaac ttctctaccc 60
taggagattc ccttctgccc ctccccgcc aatgtccctt agcccagaag taaccaccgt 120
tctcacctcc atcatcagag atcagttttg ctggcctaga attcaccba aatgtcgtca 180
tacatgtggt ttcttctgtg tgtggcctcc ttctcatcaat acaatgtttt ttatttttgt 240
atattttttg agacagggtc ttgctctgtt ctcttccgt agtgcagtgg ggcgccatca 300
cggtctgctg cagcctccaa ctcccgggt cgag 334

```

<210> 521

<211> 508

<212> DNA

<213> Homo sapiens

<400> 521

```

gaattcggcc ttcattggcct atggacaagg aagcattcag agcatggtgt catctgactc 60
cacatcacca gattcttctt taacagaaga atcacgttct gagacagcca gtagtttata 120
ccagaagatt tgtaattggg gattatctcc tggtaaccba ggagattcta aggacatgaa 180
ggaaattgag cccaattatg aaagtccctc tagtaataat caggataaag attcatcaca 240
ggcttccaaa agctcaataa aagttccaga gaccacaaa gcagtccttg ctctccgatt 300
agaagagaaa gatggcaaga ttgctgtaca aactgagaag gaagaaagta aagcctctac 360

```

agatgttgct gggcaagcag taaccataaa ccttgtcccc acagaagagc aagcaaaacc 420
 ttaccgagtt gtgaacctgg aacagccatt gtgcaagcca tatactgtcg tggatgtgtc 480
 agcagccatg gccagtggag acctcgag 508

<210> 522
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 522
 gaattcggcc ttcattggcct acaagaagaa gaagcagctg aagccgtggt gctgggtattg 60
 taatagagat ttgatgatg agaagatcct tattcagcac caaaaagcaa agcattttta 120
 atgccatata tgtcacaaaga aattgtatac aggacctggc ttagctattc attgcatgca 180
 ggtacataaa gaaacaatag atgccgtacc aaatgcaata cctggaagaa cagacataga 240
 gttggaaata tatggtagtg aaggtattcc agaaaaagac atggatgaaa gacgacgact 300
 tcttgaacag aaaacacaag aaagtcaaaa aaagaagcaa caagatgatt ctgatgaata 360
 tgatgatgac gactctgcag cctcaacttc atttcagcca cagccactcg ag 412

<210> 523
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 523
 gaattcggcc ttcattggcct aattgcacct tcatcagtc atccctgaag aattaggagc 60
 tcattttgaa agcaactaac ttctcagggt tttcttatct ttcattatct ggataaatc 120
 cctatcacat gagatcatgt tctaggaatt cggactgta ccaactccaa gaaaaccacc 180
 atctatttta aatacttttt tgtttgtttg ttttgtttga gatggaatct tgctcggtcg 240
 cctaggtctg agtgaagtga cgcgatctca gctcactgca accttctcct cctgggttca 300
 agtgattctc ctgtctcagc ctccaagta gctcgag 337

<210> 524
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 524
 gaattcggcc ttcattggcct aggggtcatg aacattcaga cttttccatc ctggctggca 60
 ccatgcacag cagaagaaag aaaatctggc ttcttttgtt cagtgaagaa cagagagaaa 120
 gagaagaatg gatggcaggg tggggggtgg ggaggaaagg aggaagggat cactttaatt 180
 acaagcacac ccttttgggg gtacataagc agaatactg tgaagaaacc ctcacccaaa 240
 taagccactt tgtttttaac acacacacac aaattcfaat ctacccaaat atctatcagt 300
 gaggtctctag ggtgttggca gagggccctt tctcttgatc tttggcatat acctgagtgt 360
 tgggcagagt gctgacacta cctactgctg tgtgatcatc ttctgttaca gatgggggga 420
 aaaaaacaga aggtctctga g 441

<210> 525
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 525
 gaattcggcc ttcattggcct accctctcca catcaacaca tacagcacca tccgaacct 60
 cagcatcaga cgtaaacaca tcaggcaccc ccacccccac aacaggtatc ctgtaattct 120
 ggtaagtgtt tgtctcctgg tttgtgtttg gctaaactgt aattaggatc tgctccttct 180
 tatttagagc tcatgtagta ttactacca aaacctcttt acatctcttt ccttgctata 240
 atcctatagt tgtaactcat ttaattcata gactgacctg gcgactttct tgattaaaat 300
 ttattgtggc aacataggca aaccaacaa ccccttctcg ag 342

<210> 526

<211> 475
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (331)

<220>
 <221> unsure
 <222> (367)

<220>
 <221> unsure
 <222> (376)

<220>
 <221> unsure
 <222> (402)

<220>
 <221> unsure
 <222> (406)

<400> 526
 gaattcggcc ttcattggcct agcaattccc ctacatcaaa tgctcaagcc cccagctgga 60
 agttaagaga aagtcacctg cccaagaaac accgagttag gcacagaata gggtctgtag 120
 gttctgtccc acctaatat agctctcatt catggagaga ctgctgttac cttaccaagt 180
 cctgtgtttg gccattatc gctttatacc atcatggcct taatacactc ctagttaggg 240
 aggggtttgt agtcccatgt tgcagagaca aaaactgagg cttggagaga gtgactggat 300
 tgtgtgatgg tcatatagga agtaagtggc ntgactggga tatgacatag gagaattgtt 360
 cttttntttt ttctcnacac tctctgttgt gtgcagggtc tnattnagat aaagataggg 420
 aattggggct aggtgggggtg gctcacacct ataatcccag cactttaagc tcgag 475

<210> 527
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 527
 gaattcggcc ttcattggcct agacgaagag gaggagaaaa accagctgga gattgagaga 60
 ctggaggagc agttgtctat caacgtctat gactacaact gccatgtgga cttgatcaga 120
 ctgctcaggc tggaaggagg cttaccaagg tgaggatggc ccgccagaag atgagtgaag 180
 tctttccctt gactgaagag ctctggctgg agtggctgca tgacgagatc agcatggccc 240
 aggatggcct ggacagagag cacgtgtatg acctctttga gaaagctgtg aaggattaca 300
 tttgtcctaa catttggtga gagtatggc agtactcagt tgggtgggatt ggtcagaaag 360
 gtggccttga gaaagtctgc tccgtgtttg aaagggtctc ctgctctgtt gggttacata 420
 tgaccaacag actcgag 437

<210> 528
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 528
 gtttattgta gtttttgatt tctgtaaaat aagagaaact tttgtattta ttattgaata 60
 agtgaatgaa gctattttta aataaagtta gaagaaagcc aatgcccgtg gcctgggcct 120
 ttgtgcagaa gacctggcc ctctgtggc tgctgcttct aggcacctcc ctgtcccctg 180
 cgtggggaca ggccaagatt cctctggaaa cagtgaagct atgggctgac accttcggcg 240
 gggacctgta taactactgt accaaatact caggctctct cttgctgcag aagaagtaca 300

aggatgtgga gtccagctctg aagatcgagg aggtggatgg cttggagctg gtgaggaagt 360
tctcagagga catggagaac atgctgctag gaagactcga g 401

<210> 529
<211> 204
<212> DNA
<213> Homo sapiens

<400> 529
gaattcggcc ttcattggcct agagggttct agggagaaag ccaccctgag cacacatgtc 60
tgggcacagt gggggctggg ggctggagct caggcaggat ggactaggct tgtggaggag 120
cgggtgggca tgagcatgtg aggacatgct gggagggctc aggaggtggc acagacattg 180
ccaaggccac tgcagggcct cgag 204

<210> 530
<211> 592
<212> DNA
<213> Homo sapiens

<400> 530
gaattcggcc ttcattggcct aagtaaaccat tttatataca gcagtgattt ttataaggcc 60
tcaaatattt aagccagcct tatgagccat tcatttatat gaaatataaa attttattta 120
ttttgagatg gagtcttgct ctgttgccca ggctggagtg cagtgggtgtg atctcagctc 180
actgcaacct ccacctcccg ggttcaaacg attctcctgc ctcagcctcc caagcagctg 240
ggattacagg catgcaccac catgcccagc taattttttt tgtattttta gttagagacgc 300
aggtttcact gtgttggtca ggctgggtctt gaactcgtga cctcaaatga ttcacctgcc 360
tcagcctccc acaagtgtg ggattacagg catgaaccac tgcacccggc cacattttat 420
atttttaata taaaggcaga aaatcataat gtttcaaatt attttggtac ctagggtatct 480
actcttataa atcaagagtg ggtcttttaa aaaatatttt tgtaagatat tgaaggcctt 540
tatatatataa ttattctatc caattagcat gcattattcct gttttactcg ag 592

<210> 531
<211> 347
<212> DNA
<213> Homo sapiens

<400> 531
gcgattgaat tctagacctg cctccttcgc cactagacct ccagggcctg gtatgtggtg 60
atcgctcagg gcccattttc ttcccttcct cctcctccaa ggggtgggaa agagcatcag 120
aagggtctagg tggccccagg cccaaacaat gctcctttaa aaggaaacta gattgttaca 180
aagggtcagag gctgaaaagt tatttcggcc ttttatccct ctaaattctt cacttcctga 240
aaaaacaaac aaacaaaaaa gccactgagg gcctctggac taaatccagg cctgagttgc 300
tgggcagagg tcagtcttgt ccagacatgg gaaaaaata actcgag 347

<210> 532
<211> 368
<212> DNA
<213> Homo sapiens

<400> 532
gaattcggcc ttcattggcct aacggtaacg gcggaggcgg aggcggcgga ggtaagaagg 60
attccattac gtaccgggaa gttttggaga gcggactggc gcgctcccgg gagctgggga 120
cgtcggattc cagcctccag gacatcacgg agggcgggcg cactgcccgg gtgcatttgt 180
tcaaggacca cgtagacaat gacaaggaga aactgaaaga attcggcacc gcgagagtgg 240
cagaagggat ttatgaatgc aaagagaagc gcgaggacgt gaagtcggag gacgaggacg 300
ggcagaccaa gctgaaacag aggcgcagcc gcaccaactt cacgctggag cagctgaacg 360
agctcgag 368

<210> 533
<211> 315

<212> DNA

<213> Homo sapiens

<400> 533

```

gaattcggcc ttcattggcct actcccagct aatggagcag cctcccattt aacagggctg 60
tccatcagcc agctccggct ggctgaggca acccagcact gaaggggtta aggccagcca 120
gcatgtgtgg ctgttaataa ttgctaccca ccagggacct ggtgagtatt aaaggaaaac 180
cttctcccta ctcttcagtg tgaaaggagt cagggctaga ggcagcagag ggaacagcaa 240
agaagagccg ccacaatgaa agacggaaca catttctaca cccagtgact ggccagggtc 300
cagaggatac tcgag                                     315

```

<210> 534

<211> 486

<212> DNA

<213> Homo sapiens

<400> 534

```

ggcggtgagc cgagatcgcg ccactgcact ttagcctggg cgacagagca agactctgtc 60
tcaaaaaaaaa aaaaaaaaaa aagaatagta aatcaaatac aggtacagtc ccttagaata 120
gggtccccaa ccccggtttt gtagtctgtt aggcattggg ttgcacagct ggtgagcaag 180
cattactgcc tgagccccgc ctctgtcag atcagcgggt gctctagact ctcacaggaa 240
cgtgaaccct attgtgaact gcacgtgcca gagatctagg ttgtacactc cttatgaaaa 300
tctaaggcac tgccactcc catccatgga aaaattatct tctacgaaac cagtttttgg 360
tgccaaaag gttgaggact gctgccttgg aatatgaagc aaactttggg tgggtctgtt 420
agacaagact cccagatgac ttggaaatgg catgctgtca gcttttttgg tcttattgcc 480
gagccg                                     486

```

<210> 535

<211> 305

<212> DNA

<213> Homo sapiens

<400> 535

```

gaattcggcc ttcattggcct agggaaatga cccaaaggaa aggtttccta tgctggttga 60
gaagaagtgt acttgccact gagcagtatg tcaggaaaga aggaatatta tctaggttta 120
gctttgataa gtgctattag taatgaatat ataacatggg aaccaatggt atctttaatg 180
ttgcttggtc tgggtgaacag agaattctaa gagctgttag aaagtagcac ttgatgcaag 240
ggatgttttg aaaagaaaaa attggtaatg cgaatgtata gaaagtaaag gaaggtatgc 300
tcgag                                     305

```

<210> 536

<211> 352

<212> DNA

<213> Homo sapiens

<400> 536

```

gaattcggcc ttcattggcct aagccagagt ttcccacgcc tctgttctct agcagcccaa 60
gtgccttcgc tgggtacttc ccacctggcc cttgcttttc attccttagg gcagtcactt 120
agcaccttcc aaagtgcctg cacatgttcc ttatttcatt tcttaaacat tcatattacc 180
actattttaga ttgaaggaaac agaattggtt tgggcttgaa gagaatacaa agagatctgt 240
cttcaattat ctgatagtag taaagtttca cgggagaaag aaagatttcg gttccacata 300
aggaaaaact tggaaagtgt tgaatggaaa gttcatagag agctgcctcg ag 352

```

<210> 537

<211> 387

<212> DNA

<213> Homo sapiens

<400> 537

```

gaattcggcc ttcattggcct agaaagcacc ttactaacg tgtgcctcag tttccttatg 60

```

```

tgtaaggtgg gggtaatagc agttcccatc ccatgggctg tcatgaggac tggatgaggt 120
ggcacatgga cccacactgg catggagttg gggagccaca ccctaactcc ccaccccaga 180
gccttctcaa gtatttttgg ctcttggttg ctccctcttg gcactggagg agcatgaacc 240
ttcctgatct gtgcgccctg ccctggccca gagctgggtg aaataaatgc ttaaccacgc 300
tcattctcca gaaccctgaa gcgggggatga gtacttccct tccttagatg aggacactga 360
ggccagaggg tgagtaacca gctcgag 387

```

<210> 538

<211> 529

<212> DNA

<213> Homo sapiens

<400> 538

```

gaattcggcc ttcattggcct agagaattcc tgtcattcct ggcctcagtt ctgcagggac 60
cgagggcgag acacgcctgg gccaggtgt ggctctcttg tcccatctg gttttaggta 120
acaagcggag cttctgaact tctcggtctt cggcagcgcc tgtatttcct ctggcctggt 180
tgggcttttc ccgcctctgg ttgcttttct gcctttctag tttttgggtt accagataga 240
aggcttggcc tcagttttgg cctcgctttt ttgctcttct taacgagcac gaagggcgca 300
tagggacgag gaggacacct ttattcttgg ctggttctag catgctgctt catgtccctt 360
ggagcagcgt gcccttctga aaaccggtgg ctaaagtctt cttctgttta tatcaggcgt 420
gttacacctt cacacgcact agggatccag gtaagcccag cggcccgaac gtcattactg 480
actggtgaca ctgcagtaag taaacctttt ttgccaaaca cttctcgag 529

```

<210> 539

<211> 500

<212> DNA

<213> Homo sapiens

<400> 539

```

gaattcggcc ttcattggcct acgatcataa agaaaaatca actgaaataa atcatgaaat 60
tcctcactgt gtgaataaac taccaaagca agaggattct aagagaaaat atgaagattt 120
atcaggggaa gagaaacatt tgggaagtcca aatactgctg gagaatactg gaagacaaaa 180
agacaaaaaa gaagaccaag aaaagaaaaa catttttgtg aaagaagagc aagaactacc 240
accaaaaata attgaagtta ttcattcctga aagagaaagc aatcaagaag atgttctagt 300
aagagaaaag tttaaaagaa gcatgcagag aaatggtgtg gatgacacac ttggcaaagg 360
cactgctccc tacacgaaag gccccctcag acaaagaaga cattactcat tcacagaagc 420
aactgaaaac ctgcatcatg ggcttcctgc ttcagggggg ccagccaatg ccggcaacat 480
gaggtacagt catactcgag 500

```

<210> 540

<211> 374

<212> DNA

<213> Homo sapiens

<400> 540

```

gaattcggcc ttcattggcct ataggccatg aaggccggga agtttatagg ctataccaat 60
aaacatctga aaagatgctc aatttcggaa ataataaaga aataaagaga aaatcaagaa 120
aacttttttc ctaaaagatt gaaaataaga caatcgaggc tgactagggt ggagcaggtg 180
ctgcccctacg tgccagccag gggatgatggg tgcagcccca ccgagcactg gcgggtggtg 240
atgggtggtgg accagcagct ggagatgctc cttcgaggga gcagtcgggc agtcacaggg 300
ctgaaaagta cctcaagccc tcacacaggg accccaagtc ttggggggagc ggggtacagt 360
acagatgact cgag 374

```

<210> 541

<211> 357

<212> DNA

<213> Homo sapiens

<400> 541

```

gaattcggcc ttcattggcct acaccttttg ccgtccccac actgcgccac cctgcacctg 60

```



```

gcaccactca gcacctcctc ctggccctac ccgtccgcc tggaaatccag ccactgagaa 120
aggcaccatt gaaacagaca taatcatggg tcagaagatg tgactcagcc tctactcaaa 180
tctgtttgtc aaacaaaaag gtgcttcgtg ttttaagtcaa actatcccta atgcattttc 240
cattctcttc aaaaaccaca gccatcagtt ttaaaaaaag acagaaaaca tgaagcacac 300
ttctcttgcc tggcttacca ttttctttga tccattaaaa tccaagagta cctcgag 357

```

<210> 542

<211> 557

<212> DNA

<213> Homo sapiens

<400> 542

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gaattcggcc ttcattggcct agcctatctc agtactatct ctaaagacct gattacatat 60
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tgccctactg aaatccagag cctaaccctc aatcccaccg ccggctgctc gtcgctcgcc 180
aaagaaatgt tcgccaatgaa aactaaggct gccttagcta tctgggtgcc aggctattcg 240
gaaactcaga taaatgctac tcaggcaatg aagaagagga gaaaaaggaa agtcacaacc 300
aataaatgtc tggacaagt gtcacaatta caaggattgt ggcgtcgctt caatcgacct 360
ttactgaaac aacagtaaac catctttatt atggtcatat ttcacagcac caaaataaat 420
catctttatt aagtagatga aacattaact ctaactgtga caaagaagac cacaatatgt 480
tatcttttaa ttacagaaga gtttcttaac ttacttttgt aagtttttat tgtgtaagtt 540
tataatgcag gctcgag 557

```

<210> 543

<211> 406

<212> DNA

<213> Homo sapiens

<400> 543

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gaattcggcc ttcattggcct agtggccttt caggagctg agggagcaa gattctaaga 60
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caatccttag gactcggagg caggcgctgt tcacatcccc cagtttacag ggggagaaac 180
tgaggcccag agaggttaag cagcttgccc agggccacac agctagcgag aagtggagcc 240
aggatctggt cccatccact gcaatccaaa gtctgtgcta tgagccgccg tcctgtcgtg 300
tcctgtctgc cttgtttgaa agtaggcgtc cccttcacgg gccaatgac cgtgcaactc 360
tttgggtgag gcatggggga ataaacagaa taaaagggtg ctcgag 406

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<210> 544

<211> 400

<212> DNA

<213> Homo sapiens

<400> 544

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gaattcggcc ttcattggcct aatgggaaca gaaaaatggc taagtaatat aaggcaagga 60
attctaaaca acagttgaat gagctagatc tctgagtaac accctgggca gaatctaaga 120
gctgaccttc acattcacta tctttaaaac taaaaagcta ctccagctac aactgacttg 180
aacaactcag aggattttac aaagttacct ctggacattt caaacgacct cttaactctg 240
gtggctcacc ctcaagcgcc tgagataatg acattgcatg aatgaggcca tgaggaaaac 300
cccacctatc tttcagtcct gtttttgaga agcacgaaca catacaatca cagtgagcgc 360
acactctcag tagcagtggg gctgagtgct ctgcctcgag 400

```

<210> 545

<211> 306

<212> DNA

<213> Homo sapiens

<400> 545

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gaattcggct tcatggccta caccgctgac ccggaaggct tccccgccac actccagagc 60
ggatgtgagg ggcgcccgat gcggagggaa cggcgaggcc tcctctagag aatgggtggg 120
gtggcgactc gggagccgga gctttggaac gaggagtggc gccattaag cgtcaatacc 180

```

tcaccaccaa ggagcagttt caccaattcc tggaagccaa agggcaggag aagacttgcc 240
 gggaaaccga ggtaggagac cctgctggca atgagctggc tgagcctgag gccaaagcga 300
 ctcgag 306

<210> 546
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 546
 gctcgagtgg tccaggcact ggggtacatg aagaggcctt tgagatattt tctgttggt 60
 tttctgggta tatcatcctc agctgggcgc tttcctgcag cccttggttc actttctggc 120
 tctccctcac tctctggctc tctttcactg tctggctctc cttcaccctc tgcccttccc 180
 cctctctctg gctttccctc tgtctttgat cctccctgca tctctgactt tcccttcctc 240
 tcttttatca ggggtggggg tcacagtctt tgtctagacc tgctcgag 288

<210> 547
 <211> 303
 <212> DNA
 <213> Homo sapiens

<400> 547
 gctttgatga ggaccctcc atcttctccc ctggcagtgt ctactttgag aagggccagg 60
 atgctgggct ctgcagcatc aatcctgttg cctgcctccc cgacctggca gcctgtgtcc 120
 cggacttacc ccctttctct taccacggct tctagctctg aggggtgtggc gggcggtgtg 180
 gttaggcaca tgtacttttc cctgtttcta cttctatctc tccgtgtttt tatcacacct 240
 gctccccaga ttccccccc ctcaatgttc ctctcacacg aaaccccat cagtaccctc 300
 gag 303

<210> 548
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 548
 gaattcggcc ttcattggcct acttgctgct aacatcttaa ttcttactta ggtatatattg 60
 atccctttat attagtgttt cttgggtttc ctttggccac acttgaatat tttccagaag 120
 atctgctaaa ggcaattttt aacatcaaat tcttagctag attggattct caactgaaa 180
 ttttatctcc atctcgaagt gcaagagtcc agtttcatct tatggagtta aatagatcag 240
 tctgcttga atgccctgag tttcagatc catgggttca tgaccgcttc tgtcaacaat 300
 ataataaagg tattggtggc atggatggaa cacaacagca gattttttaa atgttagcag 360
 agatctcgag 370

<210> 549
 <211> 353
 <212> DNA
 <213> Mus musculus

<400> 549
 gaattcggcc aaagaggcct agcagagctt tcatatccac gatgcgtttt ctggccgcca 60
 cgatcctgct gctggcgctg gtcgctgcca gccaggcgga gcccctgcac ttcaaggact 120
 gcggctctaa ggtgggagtt ataaaggagg tgaatgtgag cccatgtccc accgatccct 180
 gtcagctgca caaaggccag tcctacagtg tcaacatcac ctttaccagc ggcactcagt 240
 cccagaacag cacggccttg gtccacggca tcctggaagg gatccgggtc cccttcccta 300
 ttcctgagcc tgacggttgt aagagtggaa tcaactgccc ccccagggtc gag 353

<210> 550
 <211> 295
 <212> DNA
 <213> Mus musculus

<400> 550
 gaattcggcc aaagaggcct aaacgttaaa gcaagagaaa cgatatctgc aggacatctg 60
 gtcctaaact ggaacagaga cgcttggaat ttgtttttgt ttttgtttgt ttgtttgttt 120
 tttcttgaag tgccaaaggt caattttaca gaagatgagt ttaaaaatgt ttggacattt 180
 cttggagggtg gctgtgtggg gaacggcttg cttacaggta cagcaggtag aaccgcctga 240
 cagtctcaca ggttgtatcc cactccttac ctgtggcccc acccagcaag tcgag 295

<210> 551
 <211> 249
 <212> DNA
 <213> Mus musculus

<400> 551
 gaattcggcc aaagaggcct agtggcaagg aaagtttcac ttgggtgttc catcagtggg 60
 acaactaact caaggatttt tgcaacattg cagataacca tgaaatcatt ttgcgtacta 120
 cacttagtgg tgaggtaggg ctgcattagc atggcatggt taaccatgag ttgggggtctt 180
 attttgtctga ataagaacaa agtgggttata caagctacca atcttccaga atttacacca 240
 acggtcgag 249

<210> 552
 <211> 341
 <212> DNA
 <213> Mus musculus

<400> 552
 gaattcggcc aaagaggcct aagaagaaca aaggacccaa gaaaatgccc aaatccaaaa 60
 aaaagaagcc tttaaaaaag aaaccacaa ctgtaccctt acctcaggca aagcagcaga 120
 agcaaaagca agcaaatgga gttgttggga gtgaagctgc aataaaggag gaagaagacg 180
 acatttctga caagggcagt gattctgaag aggaagaaac caatagagat tctcagagt 240
 agaaagaaga tggtagtgac agggagtctg atagagagca agatgagaaa caaagcaaa 300
 atgatgaagc agagtggcaa gagttacaac agagagtcga g 341

<210> 553
 <211> 580
 <212> DNA
 <213> Mus musculus

<400> 553
 gaattcggcc aaagaggcct agaaccacaa gactatgaat gaaaaggctt ggaaacgctg 60
 gtgtacacag atcctctctg ccctaagcta cctgcactcc tgtgacctc ccatcatcca 120
 tgggaacctg acctgtgaca ccatcttcat ccagcacaac ggactcatca agattggctc 180
 tgtggctcct gacactatca acaatcacgt gaagacttgc cgggaagaac agaagaacct 240
 acactttttt gcaccagagt atggagaagt cacaacagtg acaacagcag tggacatcta 300
 ctcccttggc atgtgtgcac tggagatggc agtgctggag attcagggca atggcgagtc 360
 ctcatatgtg ccacaggaag ccatcagcag tgccatccag ctactagaag actcattaca 420
 gagggagttt attcaaaagt gcctgcagtc tgagcctgct cggagaccaa cagccagaga 480
 acttctgttc caccagcac tgtttgaagt gccctcactc aagcttcttg ctgctcactg 540
 tatcgtgggg caccaacaca tgatcccaga gaacgtcgag 580

<210> 554
 <211> 372
 <212> DNA
 <213> Mus musculus

<400> 554
 gaattcggcc aaagaggcct acagatagct ccaagttaca taggcggccc agcaaaactca 60
 gtccattagt gctgtgaaaa gaagtctcctt actccttggg ttcaccggtc agagcaaaaa 120
 acgcagttac cactgaagta aagccgaaca aacttctaca ctgatctcag agagcaaggg 180
 caaggacgca cgttcacgga ctgcgttttt tcaacagaca acaaagacac tgtggttagaa 240
 tttcatttca aaatgaaggc ttttgtttgg accctaagtg tactactcctt cctactgggc 300

agtgggtcatt gcaaaggagg acaactcaaa ataaaaaaaa taacccaaag gagatatccc 360
cgtggagtcg ag 372

<210> 555
<211> 302
<212> DNA
<213> Mus musculus

<400> 555
gaattcggcc aaagaggcct aggctgagga actgctgtgg agaaaggat actatgaagt 60
tatccaactt atcaagacta acaaaaagca catccacagt cggagcacct tggatgtgc 120
ctacaggact catctggtcg ctggcattgg ctctaccag catctccttc tctatatcca 180
gtcccactac cagctggaac tacagtgtcg catcgactgg actcacgtca cccatcccct 240
catgggattc aagaagccag tatctgcttc aggaaggag atggattggg caaacctcg 300
ag 302

<210> 556
<211> 284
<212> DNA
<213> Mus musculus

<400> 556
gaattcggcc aaagaggcct agtggaaactc atttttgttg ttgttgttga agataaggca 60
atttaaaactt ttttttaaaa aaaaactttt tctgcttctg tggaaactcat ttttgttgtt 120
gttgttgttg tttccaaaaa gttatggtgc tgtataggcg cttctgttg agcctgcaga 180
gtgtgagtgt aggtggtact ctctttggtg gacagcgtag ttgggaacac ctttgggtaca 240
tacaaaactg gtgtggcgat gctctgacta gcacagctgt cgag 284

<210> 557
<211> 665
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (605)

<400> 557
gaattcggcc aaagaggcct agcccagctc tgcacccaat catgaagctc cggaaagctt 60
ggctgttgtt cctgctcttg gcgctgacac agctgctggc tgcctgcgagc gccggagatg 120
cacaggaaga tacttcagat acagaaaatg cactgagga ggaagaggaa gaggatgacg 180
atgacttggg agttaaggaa gaaaatggtg tttgggtctt aaatgatggg aactttgata 240
actttgtggc tgacaaagat acagtgtctac tggagtctta tgcaccatgg tgtggacact 300
gcaagcagtt tgctccagaa tatgagaaaa ttgccagta tttgaaggat aatgatcctc 360
ccattgctgt agcgaagatc gatgcaacct cagcatccat gctagccagc aaatttgatg 420
tgagtggcta cccaccatc aagatcctga agaagggaca ggccgttgac tatgatggct 480
ccaggaccca ggaagaaatt gttgccaaag tcagagaagt ttccagcct gattggacac 540
ctccacctga agtactctt tcattgacta aagataactt tgacgatgat gtcgactgtg 600
tctanacaaa ggggtggtggg acgtcaggaa gagctcccca tggattcatg tgcacccatc 660
tgag 665

<210> 558
<211> 536
<212> DNA
<213> Mus musculus

<400> 558
gaattcgaag gaggcctagg gagggcggag gaagcggact gttccggagc tctgcctagc 60
cgggcccac ctttgctcca gagatcatgg ctgtcgagga tgtggtggcg actggcgccg 120
accgagcga gctagagggc ggcgggctgc tgcacgagat tttcacgtct cctctcaacc 180

tgctcctcct gggcctctgc atcttcctgc tctacaagat cgttcgcggg gaccagcccg 240
 gtgccagtg cgacaacgac gacgacgaac caccctcgct gcccgcctc aagcggcgcg 300
 acttcacccc tgccgagctg aggcgtttcg atggcgcca ggaccgcgc attctcatgg 360
 ccatacaacg caaggtgttc gacgtgacca aaggccgcaa gttctacggg cctgaggggc 420
 catatggggg ctttgccgga agagatgcat ccaggggcct tgccacattt tgcctggaca 480
 aagaagcact gaaggatgag tatgacgacc ttctgacct caccctcata gtcgag 536

<210> 559

<211> 229

<212> DNA

<213> Mus musculus

<400> 559

gaattcggcc aaagaggcct aggagacttc tatacattct ttcttgtcaa gaagattact 60
 tgttcaagat attccataaa aagcaactgg aataaacttc acgtaacaga gactaagacg 120
 gtgggtactg atgatcgtaa ccgcctgggc agttggcgtc ttactagtct atgggtgtgaa 180
 gacatgccag attgaaaact caaaacaaaa cacgggcaca actgtcgag 229

<210> 560

<211> 277

<212> DNA

<213> Mus musculus

<400> 560

gaattcggcc aaagaggcct atccagagtg attttctcta gctacagtct gtgcgcccc 60
 tcaatccttc tttagtcgtt tagcttttgc gatgttttct tgccattttt gtttcttctt 120
 ttgctccttc tctctggtt caatcatctt ggccaacttc caggacagta cagcactagc 180
 taggaacagt ggtgtgagcg ccaagataac tgtggttaagg aagccatatg ggtcctttgc 240
 agcccaactcc acaacatact cagcccaagc tgtcgag 277

<210> 561

<211> 308

<212> DNA

<213> Mus musculus

<400> 561

gaattcggcc aaagaggcct aagcgctaag cctggagtgt gggcactgca gtttcagagg 60
 caccgattat gagaatgtgc agctccacat gggctccatt catcctgagt tctgtgatga 120
 tatggatgcc gggggcctgg gcaagtcctt cttttaccag aagagtgcaa agctcttcca 180
 ttgccataag tgcttcttca ccagcaagct gtacgccaat gtgtactatc acatcacggc 240
 cagacacgca gcctcggaca agtggagtga gcagccgaaa gagcagccga gcaaagacac 300
 ccgtcgag 308

<210> 562

<211> 558

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (23)

<220>

<221> unsure

<222> (26)

<400> 562

gaattcggcc aaagaggcct agnagnagat ttactggaaa ttaagaactt gctgctgtta 60
 aataaaactt tgtatatgtt cagcctgcag gagataacat tttagtcaaa aaaaaaaaaa 120
 aaagaaaaaa aaagaaaaaa aaagaaaaaa gaaagaaacc attttgacag caagcacctt 180

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ctgtgaagtt ctaaaaaggg aaaggatctg cgtgtgtctg gtcatttaaa cacatattca 240
gttctgtgta ctctagagtt tgacgggtctg tatatttttc aggcagccaa gccaaagtat 300
tgatcatttt ggggtgtagaa actgtgtttt cctgtgtata tgtgatcaat atccaagggt 360
ctaaaagtta gcttgcttgt attggaattt aaaacaacaa caacaaaaag aaatatgtca 420
ctgtgttttc aatttgtatt ttcacaactg cttccttttc tatggctcct ggttcatatc 480
tcacagtgtg tagggatcat agagaacacg cagagccgca agctgtctgt cacatccagc 540
ttccgcagtt cagtcgag                                     558

```

<210> 563

<211> 263

<212> DNA

<213> Mus musculus

<400> 563

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gaattcggcc aaagaggcct atagagagtg atagtgcata acccagaatg gatgtcctct 60
ttatagccct ccttggtgca ccactcatcc tgggacagga atacgaccat gaagagcagc 120
tggaagaggg tgattactat caagtggcat attattatta cacagtgacc cctaattatg 180
atgacttcag tgtaaaactc actgttgatt actccgtgtt tgagtcagag gataggttga 240
acaggttgaa caaggaggtc gag                                     263

```

<210> 564

<211> 537

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (434)..(435)

<400> 564

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gaattcggcc aaagaggcct aatttgacaa gattcatttc acaagggtgcg tcaactctgag 60
gacatgcagt ttggcttctc ctacttttat tacctcatga gtgcagttca gccctcctcaat 120
atttcccaag tctttcatga agtagacaca gaccaatctg gtgtcttgtc tgatagggaa 180
atccgaacac tggccacgag aattcacgac ctacctttta gcttgacagga tttgacaggt 240
ttggaacaca tgtaataaaa ttgctcaaaa atgctccccc ctaatatcac tcaactcaac 300
aacatcccac cgactcagga agcatactac gaccccaacc tgcctccggt cactaagagt 360
cttgtcacca actgtaagcc agtaactgac aagatccaca aagcctataa agacaagaac 420
aaatacaggt ttgnnatcat gggagaggaa gaaatcgctt tcaagatgat acgaaccaat 480
gtttctcatg ttggtggcca gttggatgac atcagaaaaa accccaggac agtcgag 537

```

<210> 565

<211> 418

<212> DNA

<213> Mus musculus

<400> 565

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gaattcggcc aaagaggcct agggaaagtgc gaaatcaaag ttgcgcaacc caaagagggtg 60
tacaggcagc agcagcaaca acagaaagga ggcagagggg ctgcagccgg cggaagagga 120
ggtgctaggg ggcgtggaag aggtcagggc caaaactgga accaaggatt taataactat 180
tatgatcaag gatatggaaa ttataatagt gcctatggtg tgatcagaa ctatagtggc 240
tatggcggct atgattatac tgggtataac tatgggaact atggatatgg acagggatat 300
gcagactaca gcggtcagca gagcacttac ggcaaggcgt cccgaggggg cggcaatcac 360
cagaacaatt accagcccta ctaaaggagg acgctgggag agcagcgggt aagtcgag 418

```

<210> 566

<211> 420

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (268)

<400> 566

```

gaattcggcc aaagaggcct agtggatgga gcagtcacag tgattactat gcaaattatt 60
actctggcca gtatgattat ggagacccca gccgctggga tcgttactat gggctctgcc 120
ttaggggatcc tcgcacctgg gaccggaggt actggtatga ctctgaacat gaccataca 180
ggaaggacca ctatgcttac agtgacaggc ctgagaaatg tgatgatcac tggaggatg 240
accctcgctt cactgggagc ttcgacgntg acgctgagat ccacagggac ccctatggag 300
aagaagcaga cagacgcagc atccacagtg agcactcggc acggagcctg cgacgactc 360
acagtctgcc cagccgccgc agcagcctca gctcccatc acaccagagt cggggtcgag 420

```

<210> 567

<211> 385

<212> DNA

<213> Mus musculus

<400> 567

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gaattcggcc aaagaggcct agaaaatgaa aaactcacag aaacctcaga agatagattc 60
agaaataagt cccaagaagg ataatgaaga atttctacaa aataaaaaaa agaaaagggg 120
taccactgac cttagtgtag aagctttgcc caaaggaaag ctaaggacca aagattccag 180
tacctctgaa atggtgaaat cttcaacaat gagttcttct aaggcaaaga gagaaaagca 240
atcagtgggt ccagtcataa tggcaaaaga caatgatggg aaaatgcctg acgaagatgc 300
cctggaggag gattcagata gtgctagtga gctaggaagt gatgaggaat ctgaagatga 360
aatcataagt gatggtatcg tcgag 385

```

<210> 568

<211> 282

<212> DNA

<213> Mus musculus

<400> 568

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gaattcggcc aaagaggcct actagacctg cgtcgacgga gctgatttgc cattgggtgcc 60
agtctcaaac cccgaagcca cgatttgcct tatttttcac tgtttggctt gatctattcc 120
catccctgag acagagcccc tgccttaaag actggttttg taatgacaga cgtctccggc 180
actcagaatc actttaattt catagagttg gggtttttat ttttgttttt tttttttccc 240
aagtgcacag aagggtgtgt cacacccacc agactagtctg ag 282

```

<210> 569

<211> 329

<212> DNA

<213> Mus musculus

<400> 569

```

gaattcggcc aaagaggcct aaaacctcat gagtgccttg cactgaata catccattgt 60
gggtttggct tgaatgggtg ttaaaaacca tccctgagca gaggggaagc tgtaaactg 120
tcagtcaaag cagtttggga aataaaagag actgggccct gggtcatctt actagataac 180
actttgtaaa aattgggtct gaaaacctg tttatttgca tatttgtgaa aacctgtat 240
atgtgggtgt tttgtgagtg tgcttaaaag tgggtgagac agggcaagat cgctcattgg 300
aacagctgtg tggaatgggg aaagtcgag 329

```

<210> 570

<211> 280

<212> DNA

<213> Mus musculus

<400> 570

```

gaattcggcc aaagaggcct atctgtgtct gtggacctga atgttgacct atcgcttcag 60
atcgacatac ctgatgcact cagtgcagaga gataagggtc agtttacagt gcacaccaag 120
accacactgt ccacatttca gagccagag tttctgttga caaggcaaca tgaagacttt 180

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gtgtggctgc atgacactct tactgaaaca acggattatg ctggccttat tatccctcct 240
gctcctacaa agccagactt tgatggccac gagagtcgag 280

<210> 571
<211> 291
<212> DNA
<213> Mus musculus

<400> 571
gaattcggcc aaagaggcct aaaaaaaagg ttttattttt cccttcttgt agtaagtgt 60
ctagtctctgg gtgtcttcac tgccttgccc tggaactgtg tttagaagag agtagcttgc 120
cctacaatgt ctacactggt cgctgagttc cctgcgcact gcacctcact gtttgtaaat 180
gctgtgatta ggttccctta tggcaggaag gctttttttt tctttttttt ttttcttttc 240
tttttttttt ttttaaagga aaaccagtca aatcatgatg ccacagtcga g 291

<210> 572
<211> 234
<212> DNA
<213> Mus musculus

<400> 572
gaattcggcc aaagaggcct aatactttat aaataaaaaa aaaaaaaaaa aaaaagaaaa 60
gtgaaatata tatatatatc ccacagtaatg atagataagt taccacccag gctctgtttt 120
ttgtttgttt ggctttttgt tttgttttgt tttcttcccc tttccccca atcagaacag 180
acacagttgg tggggacagt aatgtgtgga gtcttgaaac caggaagcgt cgag 234

<210> 573
<211> 273
<212> DNA
<213> Mus musculus

<400> 573
gaattcggcc aaagaggcct aagcatttat ttaagtggag aattaattag ttttgtattc 60
cctatttttac aaaaattgat aaagatatag ttcattggatt ttattctgct gttatgggtt 120
tattttctatg ggtctgaaag cataacatgc tcttccatgg ttttccctc tcggaccacag 180
ccctggcttg gcaggcctct ttccacagtt aacagtgttg atctctgcta ctcaaccagt 240
ccttctagga atgaatctcc catcagagtc gag 273

<210> 574
<211> 251
<212> DNA
<213> Mus musculus

<400> 574
gaattcggcc aaagaggcct aaagaagata accacatcaa gatggttggg aagctgaagc 60
agaacttact cttggcgtgt ctggtgatta gttctgtgac cgtgttttac ctgggccagc 120
atgccatgga gtgccatcac cgaatagagg aacgtagcca gccagcccga ctggagaacc 180
ccaaggcgac tgtgagagct ggcctcgaca tcaaagccaa caaacattc acctatcaca 240
aagaagtcga g 251

<210> 575
<211> 300
<212> DNA
<213> Mus musculus

<400> 575
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ggcttcacag gagcaacgat ggggagcctc atctgcttta tctgcccggc tctgatctat 120
aagaaagccc acaagaatgc cccctcagcc caggtggtgc tctgggtcgg cctgggcac 180
ctcgtgttca gcacactcac caccctctct gtgaccgaag aagctcctct ggacttgacg 240

caagaagctc gcagcgccca ccgaggagat gctgagggcg caatgaaggt gaaagtcgag 300

<210> 576

<211> 353

<212> DNA

<213> Mus musculus

<400> 576

gaattcggcc aaagaggcct agcagagctt tcatatccac gatgcgtttt ctggccgccca 60
cgatcctgct gctggcgctg gtcgctgccca gccaggcgga gccctgcac ttcaaggact 120
gcggctctaa ggtgggagtt ataaaggagg tgaatgtgag cccatgtccc accgatccct 180
gtcagctgca caaaggccag tctacagtg tcaacatcac ctttaccagc ggcactcagt 240
cccagaacag cacggccttg gtccacggca tcctggaagg gatccgggtc cccttcccta 300
ttcctgagcc tgacggttgt aagagtggaa tcaactgccc cagtacagtc gag 353

<210> 577

<211> 292

<212> DNA

<213> Mus musculus

<400> 577

gaattcggcc aaagaggcct aaaagaagga accgtgaaca ttttagacac ctttttcttt 60
ggggtaggct ctgccccagg cgccgtctcc tttcccccc caaacactaa tgcatttccc 120
taacctagtc acctcgcttc taaaggcttt cctaccccag ccaaattctc aaaagttagt 180
caaggggcta aaaaacaagg ctggcctcat ttgctggacc aaatctacag ggagaacccc 240
tgagtggagt tgtccaggga attgtcccct ggtgagggaa gcaggggtcg ag 292

<210> 578

<211> 351

<212> DNA

<213> Mus musculus

<400> 578

gaattcggcc aaagaggcct agaaaacaaa aaagaacaag caggagatag cgtttgtcct 60
ccctaaccac acagcatcat ctcaccggct cgtgggactt gacgtgaatt ctgtgggtta 120
atgcaccagg cttactagt tccattttca tccaagatcc ttactctcta acgttcttgg 180
tcctattgaa gcatttcagt atctaagcat actgcaatgt taatacccaa gagaaaagcc 240
attacgtacg tattctggtc acacgatcgg tgtggcaccg ttttatttgt tactgttgtt 300
gttttatttt gttgtttctg ttttttaaat aaactatcac acccagtcga g 351

<210> 579

<211> 281

<212> DNA

<213> Mus musculus

<400> 579

gaattcggcc aaagaggcct acaaaggaca gccctgtctg cactactgagt tactgtggat 60
ttttaagaaa cttcgctaaa gaatttaggc atttctgatt cagttaaagg attgccaatt 120
catcagtccc tgaactaga gcaatctcaa caggacaaga aaagaaaatg ggctttttta 180
gtccaatata tgtccttttc ttctgttttg gagttagagt atactgcaa tatgaagctt 240
accgatggga tgacgattat gaccaagagc aaaatgtcga g 281

<210> 580

<211> 317

<212> DNA

<213> Mus musculus

<400> 580

gaattcggcc aaagaggcct aggaaagcaa aggaggatag taccaagcaa gtgtctattc 60
gcagaaatca aagagaggaa accggcgctc caatgtctca gaaagtgaga gaagctggga 120

gagacgtcag ctacttgata gtggtgctct ttggagtcgg ccttacaggc ggcttggtat 180
 acgcgatctt caaagaactg tttttttcgt ccagccctaa tatcatatat gggaaagcct 240
 taggaaaaatg cagaacacac cctgaggtga ttggtgtatt tggtaggcct ttgaaaggct 300
 acggggaaag agtcgag 317

<210> 581
 <211> 397
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (272)

<400> 581
 gaattcggcc aaagaggcct aagtttcggt tttgttttgt tttgttttgt tttgttttgt 60
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 cttcagttgt ctcttttttag taaacccagt actttccaca aagtcttctc tgaccttccc 180
 catcactgga cggttcaccc atcttcttct ccaagtgttt atcccccagc ccaagccttt 240
 cctgctgcaa gccaaagcctg ctacatttgt tncagaccaa gcttatacac agctcgacaa 300
 ctgcactccc actgtaggct ccggtgtgta ctcttcttct gtgttgggaa ggggaagtga 360
 agtgataagc cagaattttt ttcaggaggt tgcgag 397

<210> 582
 <211> 282
 <212> DNA
 <213> Mus musculus

<400> 582
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 atgtttcggc ctccccggac ctgcactgc agtgtctgcg acaactgtgt ggaacggttt 120
 gaccatcact gcccttgggt gggcaactgt gtggggagac ggaactaccg cttcttttat 180
 gcgtttattc tctccctctc cttcttgacg gccttcatct tcgcctgcgt ggttaccac 240
 ctgacccttc tttctcaag aagcaacttc ctctccgtcg ag 282

<210> 583
 <211> 246
 <212> DNA
 <213> Mus musculus

<400> 583
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 gtcaaagatt tggactggaa atgggtcata ttttggtcct atgtctttgg cagctgcctt 180
 aaccactcca tgactctggc tatccatgag atttcccaca atttcccctt tggccaccct 240
 gtcgag 246

<210> 584
 <211> 539
 <212> DNA
 <213> Mus musculus

<400> 584
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 tcctgcgga gatgtttgaa cccaagagct gcacctatac ctaccttctg ggtgaccggg 120
 agtcaagaga ggcagttctg atcgaccccg ttctggagac agcgcacgga gatgtcag 180
 tgattaagga gctggggctc aagctgttgt acgctgtgaa cactcactgc catgctgacc 240
 acatcaccgg cacgggggtt ctccgggtccc tgctcccggtg ctgccagtct gtcactctcc 300
 gcctcagcgg agcccaggct gatttgcata tcggggaagg tgattccatc cgctttggac 360
 gctttgcttt ggagactcga gccagccctg gccacactcc aggctgtgtc acctttgtcc 420

tgaacgacca gagcatggcc ttcactggag atgccctgct gatccgaggg tgtggacgga 480
cagacttcca acaaggctgt gctaagactt tgtaccactc tgtgcacgag acagtcgag 539

<210> 585

<211> 419

<212> DNA

<213> Mus musculus

<400> 585

gaattcggcc aaagaggcct actggaagat tacgggactt tgaagtaaaa gatctactta 60
gtctaactca gttcttttggc tttgacacgg agacattttc cctagctgtg aatttactgg 120
acagattctt gtctaaaatg aagggtacagg cgaagcatct tgggtgtgtt ggactgagct 180
gcttttattt ggctgtgaaa gcgactgaag aggaaaggaa tgtccactg gcgactgatt 240
tgatccgaat aagtcagtat aggttcacgg tttcagacct gatgagaatg gagaagggtcg 300
aggttctccc tatagttagt cgtattaatt tcagaggagt atttagaaga gaagctgaag 360
ctgtcgagac aaacgaaact agtgatagac ctttgggtcc acttcacaac caacaaggg 419

<210> 586

<211> 350

<212> DNA

<213> Mus musculus

<400> 586

gaattcggcc aaagaggcct agagctttca tatccacgat gcgttttctg gccgccacga 60
tcctgctgct ggcgctggtc gctgccagcc aggcggagcc cctgcacttc aaggactgctg 120
gctctaaggt gggagttata aaggaggtga atgtgagccc atgtcccacc gatccctgtc 180
agctgcacaa aggccagtcc tacagtgtca acatcacctt taccagcggc actcagtccc 240
agaacagcac ggccttggtc cacggcatcc tggaagggat ccgggtcccc ttccctattc 300
ctgagcctga cggttgtaag agtggaatca actgccccat caatgtcgag 350

<210> 587

<211> 278

<212> DNA

<213> Mus musculus

<400> 587

gaattcggcc aaagaggcct agcgaagga ttttaaggaa cagatcatcc accatgtggc 60
cactatcatt ctctctgct tctcctgggt tgccaattac gtccgggcag ggaccctcat 120
catggctctg catgacgctt ctgactacct gctggagtct gccaaagtgt ttaactacgc 180
gggatggaag aacacctgca acaacctctt cattgtgttc gccatcgttt tcatcatcac 240
tcggctgggt atcatgcctt tctggatcct acgtcgag 278

<210> 588

<211> 558

<212> DNA

<213> Mus musculus

<400> 588

gaattcggcc aaagaggcct agaagaagat ttactggaaa ttaagaactt gctgctgtta 60
aataaaaactt tgtatatgtt cagcctgcag gagataacat tttagtcaaa aaaaaaaaaa 120
aaaagaaaaa aaagaaaaag aaaagaaaaa gaaagaaacc attttgacag caagcacctt 180
ctgtgaagtt ctaaaaaggg aaaggatctg cgtgtgtctg gtcattttaa cacatattca 240
gttctgtgta ctctagagtt tgacggactg tatatttttc aggcagccaa gccaaagtat 300
tgtatcattt ggggtgtagaa actgtgtttt cctgtgtata tgtgatcaat atccaagggt 360
ctaaaagtta gcttgcctgt attggaattt aaaacaacaa caacaaaaag aaatatgtca 420
ctgtgttttc aatttgtatt ttcacagctg cttccttttc tatggctcct ggttcataac 480
tcacagtgtg tagggatcat agagaacacg cagagccgca agctgtctgt cacatccagc 540
ttccgcagtt cagtcgag 558

<210> 589

<211> 249
 <212> DNA
 <213> Mus musculus

<400> 589
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 gcaactgtatc aaaaacaggt tactttgcctg aacatgggtta gtgtactaac aggtctgccc 180
 acccctaccc tcaccccccag cttcatgccca gcatatgtag atttgagttc taacacagca 240
 catgtcggag 249

<210> 590
 <211> 340
 <212> DNA
 <213> Mus musculus

<400> 590
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 gaaaacaact taccgaaacc tcagacaaag cgtcaaatct cagaggatgc tacgagctct 120
 ttggctcttc tggatcttgg tggccataac agtctctctc agcaaacgct gttctgtctca 180
 ggagtcctctg tcattgtgatg cttctgggggt gtgtgatggc cgctccagggt ctttcacctc 240
 tattccctcc ggactcacag cagccatgaa aagccttgac ctgtctttca acaagatcac 300
 ctacattggc catgggtgacc tccgagcgca ttacgtcgag 340

<210> 591
 <211> 169
 <212> DNA
 <213> Mus musculus

<400> 591
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 gtgttctgca atgagggttt tcacctcttc gatctcctgg gggataactt ccttatcttt 120
 ctccggtcagt gtggtttccg cccactgtag ccatgccagc aaagtcgag 169

<210> 592
 <211> 447
 <212> DNA
 <213> Mus musculus

<400> 592
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 tacatcttcg catctatgct gggccatgac atccacggag gaattgtcct gcctcttctg 120
 tatttttgcct tcacaaggaa aaaccctgac acgttctctc tgggcctcct caccctattt 180
 gcgacagctt ttgcgacctg ttccagctca gcaacccttc cgtctatgat gaagtgcatt 240
 gaggagaaca atggtgtaga caagaggatc agcagggtta tcttccccat tggggccacg 300
 gtcaacatgg acggagcagc catcttccag tgtgtggccg cagtgttcat tgcccagctc 360
 aacaacgtag acctgaacgc aggacagatt ttcaccattc tagtgactgc caccgcatcc 420
 agtgttggag cagcaggtaa tgctcgag 447

<210> 593
 <211> 430
 <212> DNA
 <213> Mus musculus

<400> 593
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 ggccctgggc agcaccatcg tccccagctt ctgcttccgg ccccagatca gctcagccag 120
 ccccagcgtc cagcctggc tcagccccgc acgcctctct tggcgcttcc aggtccagg 180
 cagcgcctgc ggtccatcca gactccatgg catcgctacc gccactccg gtccctgttg 240
 acctcatgct acctctgcgg gtctctactg accgtttggc accgttgcca acctttgcgg 300

tcattggacca cactgtgtcc ttgtgaccag ccctgtaggg ctaccacagg acagcactgc 360
 cagcccccac agtctctgct agtccggtgt catcagtgcc ctccgactct caccttgcaa 420
 ccacgtcgag 430

<210> 594
 <211> 259
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (148)

<400> 594
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 tccagttgca agtttagaggc aagccagcta gctgccagc ctttaactctg ttcagtggcc 120
 tgttactaac attttttaac agattggntt ctacatgttt aaagtatcca gcgttggatt 180
 ttacctcttg ctagtcccat ttgtccctgg tgctgctttt aaaggtatag ggcctgtga 240
 agtgtccagt aacgtcgag 259

<210> 595
 <211> 317
 <212> DNA
 <213> Mus musculus

<400> 595
 gaattcggcc aaagaggcct acctttgacc tctgaaaaa cctatatagt ttctcctaca 60
 gacaccttgc cagtaacctt acaggtctta taggagagca gatccaagt gccaggctga 120
 tctgcaagca caaacatttg tcaagggaag gcacaggctg ttactttcag tacaaaatgg 180
 ttctttgcta tggatggatt ctctctctt tgcccatgt cctgttccca aggaccgact 240
 tcctgcagca ctgtggtgga ctctctatg aggagacaac atctgggcct tattcaatag 300
 cctgtggcgg ggtcgag 317

<210> 596
 <211> 271
 <212> DNA
 <213> Mus musculus

<400> 596
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 cataaaacac actgggttag aatagaggct cctgcattac atggtttctg tcaactgttt 120
 ttgttgggtt ttcttttttg tttttcgaga cagggtttct ctgtatagcc ctggctgtcc 180
 tagaactcac tctgtagacc aggtggcct cgaactcaga aatctgccc cttctgcctc 240
 ccaagtgtg ggattaaagg caagagtcga g 271

<210> 597
 <211> 338
 <212> DNA
 <213> Mus musculus

<400> 597
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 acatcagcag ccggccgccc ttggtggttt ttatgatcag tgcagcgc atggccatcg 120
 ccttcctcac cctgggttac ttctcaaga tcaaggagat taagtccca gaaatggctg 180
 aggattggaa tacttttctg ctccggttta atgatttga cttgtgtgta tcagaaaacg 240
 agacactgaa gcattctctc aacgatacca ccacaccaga gagcaccatg accgtcgggc 300
 aggccagatc gtctaccag ccgcccag cctcgag 338

<210> 598
 <211> 304

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (161)

<400> 598

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aaggatgagg accatgaccg catgtatgtg ggcagcaagg actacgtgct gtccctggac 120
ctgcatgaca tcaaccgaga gccccttata tcattgggca ncctccccgc agcgcattga 180
gagtgcatac tgtcaggcaa ggatggcaat ggagagtgtg gtaacttcgt ccggctcatc 240
cagccttggg accgaacaca cctgtatgtg tgtgggaccg gtgcctacaa cccacgcgt 300
cgag 304

```

<210> 599

<211> 169

<212> DNA

<213> Mus musculus

<400> 599

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gaattcggcc aaagaggcct aggagaaaaa actaaaggag tacatgcgca tgatggggct 60
taacagtgtg ctacactgga gcgcttggtt cctcatgttc ttctatttct tctcatcgt 120
ggtctccttc atgacgtccc tgttctgtgt caaagtgaag acggtcgag 169

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<210> 600

<211> 326

<212> DNA

<213> Mus musculus

<400> 600

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aaaaagaaaa cagagaagcg tcaatagtaa aagaagagac ccaagggatc acagacactt 120
acaagctgct attctcaatt ataaaaatgc cagcagttct ggctttttgc cttctgattc 180
taacgtcaaa gattggcttc tcagcagctg atgctgtgac aggcctgaag ctggtggaag 240
aaggggtgcc taaagagcac ctggccttac tagctgtccc aatggtcctt ctgcagataa 300
tcctgccact cctcgtgcaa gtcgag 326

```

<210> 601

<211> 355

<212> DNA

<213> Mus musculus

<400> 601

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gaattcggcc aaagaggcct actgtgaaaa gatgtcgctg tcttccaaag tgtccctccc 60
ccctattcct acagtaagca atatcaaact tctctccttc cccaaacttg actctgatga 120
cagcaatcag aagacagtca agcttgcgag cactttccat agcacatcct gcctccgaag 180
tggcgcatcc cggagtctcc taaagccttc caccctaaagc agtgccagtg agctcaatgg 240
ggaccacact cttgggcttt cagctttgaa cttgaacagt ggcacagagg tgccaacact 300
gacatcctcc cagatgcctt ccctgtctag cgtgtctgtg tgtacagaag tcgag 355

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<210> 602

<211> 371

<212> DNA

<213> Mus musculus

<400> 602

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gaattcggcc aaagaggcct aagtaaagaa actgttagaa agcagatacc atcaaatagg 60
ttctgggaag tgcgaaatca aagttgcgca acccaaagag gtgtacaggc agcagcagca 120
acaacagaaa ggaggcagag gggctgcagc cggcggaaga ggaggtgcta gggggcgtgg 180

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aagaggctcag ggccaaaact ggaaccaagg atttaataac tattatgac aaggatatgg 240
 aaattataat agtgccatag gtggtgatca gaactatagt ggctatggcg gctatgatta 300
 tactgggtat aactatggga actatggata tggacaggga tatgcagact acagcggcca 360
 gcagagtcga g 371

<210> 603

<211> 529

<212> DNA

<213> Mus musculus

<400> 603

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 tgctgtagca ttctttttaa aaatgtgccaa taaacagtct atagtaaaat tgagagacaa 120
 aaatagaagc ctgtctttac cctaaaatag aataaacttc ttaagaaggc caggaaggct 180
 ttaccacggc ttggtagagg aagaaaaact tgttttcata aatatttgc ttgtgaagac 240
 acggtgaaga taattgttca gggccaggat gtaccctaag agagagtgcg tgcattggcat 300
 atttaaggcc ctcatgtatc cctagcctga caaaaaggct ttcttcctaa tctctaaagt 360
 caagttgaaa gcttttatta attctatgtg taatagagtt ttaaaataag ttatatcca 420
 gttttttcag cagtgaactc ctaagtcaaa cctatcaaat ccttgtaatg aacctgtaac 480
 cattcgtctt ttataatga gattttctta aatttggcaa gaggtcgag 529

<210> 604

<211> 263

<212> DNA

<213> Mus musculus

<400> 604

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 tgaatctaag tcttctaact aacttatata tctttctgcc ttggtgctgg gagcggaact 120
 tggatcttct tcaagagcag gacttgctct cagctgctaa gtcattctcca gccccattt 180
 gtttggttgg agagcaggtc tcactctgtg gtccaggctg gtttggaaact cactttgtag 240
 cacacgttgt cctcacagtc gag 263

<210> 605

<211> 241

<212> DNA

<213> Mus musculus

<400> 605

gaattcggcc aaagaggcct agtctggcat ggtacttggg gtgggtgctg gcgtgttcct 60
 cctcgctctg atctgggtgc tgggtgctgt gctgtgtgtg ctgttatcca gagcctctgg 120
 gatagctagg ttctccatcg tctttgtctt cctcggagct ctgatcatta ctacagttct 180
 attgcttttc cctcgagcca gtgaattccc agccccagaa ggagaaataa agcttgtcga 240
 g 241

<210> 606

<211> 279

<212> DNA

<213> Mus musculus

<400> 606

gaattcggcc aaagaggcct agtgcatttg aaacattggc aacagcaatt tctttaatta 60
 aacaatccaa agtctctgca gatgatcggt gcaaagttct tattagctct ctgcaggatt 120
 gccttcatgg aatcgagtcc aagtcctatg ggtctggatc cagacgtgaa cgatcaagag 180
 aacgggacca tagtagatca cgggaaaaga gtcgtcgcca taaatctcgg agtagagatc 240
 gccacgatga ctattacaga gagagaagca gaggtcgag 279

<210> 607

<211> 276

<212> DNA

<213> Mus musculus

<400> 607

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gaattcggcc aaagaggcct agtgaaatct ttagtctaca tgttggcagc caccttgctt 60
ggcctggggt tgcacccaat ttctgggcat tttatagccg aacattacat gttcttgaag 120
ggacacgaaa cctactccta ttatgggcct ctgaacttgc tcaccttcaa tgtgggctat 180
cataacgagc accatgactt cccaacgtt cctgggaaaa acctgcccac ggtgaggaag 240
atcgcaagtg agtactacga tgacctcca gtcgag 276
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<210> 608

<211> 332

<212> DNA

<213> Mus musculus

<400> 608

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gaattcggcc aaagaggcct aacatttact taaaggagaa aagaaagggg gtcgcagaaa 60
tggctggggc aattatagaa aacatgagta ccaagaagct ctgcattgtt ggagggattc 120
ttctggtttt ccaaatcgtt gcctttcttg tgggaggcct gatcgctcca gcaccacaa 180
cagcagtacc ctacacggca ataaaatgtg tggatgtccg taagaaccac cataaaacaa 240
gatggctggc gccttgggga cctaacaagt gtgacaagat ccgtgacatc gaggaagcaa 300
ttccaaggga aattgaagca aatgacgtcg ag 332
```

<210> 609

<211> 308

<212> DNA

<213> Mus musculus

<400> 609

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gaattcggcc aaagaggcct acctttcttt cctcccttcc tccctccatg tccctctctc 60
ctccctccca cctctcacc ttctccatcc ctccctccctc tttctttttg tactttccag 120
ctggagcagc agcagcagct gggcctgaat caatgattga cttccccacg acctccccct 180
ctcttttgcc aatgatatct ctttgccctt ccagtcactt ttaatttta tcgtgtatgg 240
ttttgcttct ccttctctct cctctctct tccctcttcc tccccctct cccccaccga 300
cagtcgag 308
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<210> 610

<211> 310

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (122)

<220>

<221> unsure

<222> (125)..(127)

<220>

<221> unsure

<222> (259)

<400> 610

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gaattcggcc aaagaggcct aggggtgtgt gtgtgtgtgt gtgtgtgtat ggcttattct 60
cccaatgaaa tacatatata tatatatgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtatg 120
tncnnncct aagttgcatt ctgtcacaat aacaaagaac atggatttcc aacataatga 180
tgcagatata aaaaaaggaa aggaagagag gggggaggga gggagtgaga aaaggaggga 240
gggaggaagg gagggaggna gggaggagg gagggaggga gggaggagg gaggaaggga 300
ggaagtcgag 310
```


<210> 611
 <211> 326
 <212> DNA
 <213> Mus musculus

<400> 611
 gaattcggcc aaagaggcct aaggagatga gagagggatt gtgagtagtg gagtaaacca 60
 ttgtgaatct ggtgaaatgg atgacccagg tgtgcagcag cagagtcata gcagggcatg 120
 cagtagcaca gctgtgggtg catgtgcccc tgtgaacatt aacataacag ggctatacat 180
 ctgccagcag ctgaggctag acagccaact tggactttat gggccattcc tctacaggct 240
 caccactcat cccatggcca aggcagcttt cccttctgtg ttttctgtgt cctcagcctc 300
 cacctttctg ccacccacga gtcgag 326

<210> 612
 <211> 278
 <212> DNA
 <213> Mus musculus

<400> 612
 gaattcggcc aaagaggcct aagagattca ggacctgcag agtcgccaga agcatgaaat 60
 tgaatctttg tatactaaac tgggcaaggt tccccctgct gtcattattc cccagctgc 120
 tcctctgtcg gggagaagaa ggagaccac taaaagcaaa ggcagcaagt ctatgcgcag 180
 cagctcattg ggcaataaaa gccacagct ttcaggcaac ctgtctggtc agagtgaac 240
 ttcagcttta caccaccaac agaccctcca cagtcgag 278

<210> 613
 <211> 346
 <212> DNA
 <213> Homo sapiens

<400> 613
 ggcaagaact attcttatgc agtcaagttt accacaggct cagctggctt caatatggaa 60
 tctttctgac attgatcaag atggaaaact tacagcagag gaattttatcc tggcaatgca 120
 cctcattgat gtagctatgt ctggccaacc actgccacct gtcctgcctc cagaatacat 180
 tccaccttct tttagaagag ttcgatctgg cagtgggtata tctgtcataa gctcaacatc 240
 ttagatcag aggtaccag aggaaccagt tttagaagat gaacaacaac aattagaaaa 300
 gaaattacct gtaacgtttg aagataagaa gcgggaggca ctcgag 346

<210> 614
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 614
 gaattcggcc ttcattggcct agaatgggtct gaactaggcc ccatatttta aaagaaatac 60
 acttattacc tttaaaatca tatatattca cttccaactc aaatggcaaa cgaagcacct 120
 cccactcgaa gccagctga aatattttta aatgtgtgtt aaataaaaaa tttctggccg 180
 ggcgcggttg ctcttttaag gagttttgct ggggaagggg gcagagaaat aggatagtag 240
 gtggaaggga aagttagatt agcagatttt ttgtttttaa aagataggaa atgtaacatg 300
 tataggctga tgagagtagt ggttaaagag gggaactgct cgag 344

<210> 615
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 615
 gaattcggcc ttcattggcct agagctggct ttggggtgac gtcggcagga ggggcagagg 60
 ggctctggga aggtctctgc ggtgtcgcg taagttagat gctgggaggg ctctgggcca 120
 ggcccttctg ggggtcccag ctgctccac tgcagcttgg ttccacatct ttcttcagcc 180

```

tcttgccgtc aatgggctct cgggggacag atggccttcc tcgggtgtgc ttagaggaga 240
aactgtacga atgaagttag ccgataaatt tgcacgcccc agatcctggg gccgttaaagt 300
catccataga aatgccactc ttatctgtca cgcctcttcc gatggaggaa gtggcgctct 360
catcgccagc atctgtggca gacgcttctg cttttccctg actgcctgcc accatggtgg 420
ccagtccatc tcctggagtc cgttccagag cttgctgggc ctgctcctgg ctggcggcct 480
cctgggccgc cctgggtgtg gcttcacctt gcagagcagc ttgcttcaac ctgcggggact 540
ctggcttggc catcgggttt cactcgag          569

```

<210> 616

<211> 355

<212> DNA

<213> Homo sapiens

<400> 616

```

gaattcggcc ttcattggcct agtttctgcg cccctgcct accccacttc cccctccagt 60
tctcagcttc tctttgaagt ccgagaagt aggatgcgc tgtgggtcgc agcgggggag 120
gaaaggggag aagaagggga atgcctccac ctccaaactg ctacattaaa gaaagtgttc 180
aagttccctg aaggacagat acggaagatt ataaaaccag cttctagttt gtctccatgt 240
ggaagttagc ccttctggcc tctccgcac ctcttcagta tctatcctcc taccgagcac 300
ccatctgatg gatctctccc cactgcaacc caccctcttc tcaggggagc tcgag      355

```

<210> 617

<211> 514

<212> DNA

<213> Homo sapiens

<400> 617

```

gaattcggcc ttcattggcct agcctcttgc agcttaccgc ctaaaatgtt ccgggcccag 60
agcaaagctt ttatgccttt gaagtgaagg atgcaaaagg aagaactgtt tctctggaaa 120
agtataaagg caaagtttca ctagtgttaa acgtggccag tgactgccaa ctcacagaca 180
gaaattactt agggctgaag gaactgcaca aagagtttgg accatcccat ttcagcgtgt 240
tggcttttcc ctgcaatcag tttggagaat cggagccccg cccaagcaag gaagtagaat 300
cttttgcaag aaaaaactac ggagtaactt tccccatctt ccacaagatt aagattctag 360
gatctgaagg aagacctgca tttagatttc ttgttgattc ttcaaagaag gaaccaaggt 420
ggaatttttg gaagtatctt gtcaaccttg aggggtcaagt tgtgaagttc tggaggccag 480
aggagcccat tgaagtcatc aggcctggct cgag          514

```

<210> 618

<211> 433

<212> DNA

<213> Homo sapiens

<400> 618

```

gaattcggcc ttcattggcct agagatcgtc tcatttaggt taaaatgggg agactgaggc 60
ttttaatggg cagcgtttgc ctaagattac cctgatttaa cggtagtggt aggttttagtc 120
tctcaacatt tgctctgggc aaagaaagcc cttacctgga caaccatcct ttctggactc 180
caagttaagc tctttattta tttttttggg cagtcagatg agggaaatggg tagatttttg 240
tgagtctaga ccacagtcgc atgaccaacc tttttcaagt gggatcccat aaatctgcgc 300
gaccgcccgc gcgattggcc tcaccatccg catcgcccag caggggggcgc ccaggggggc 360
catctcagtg cgttagcaaa gggcggaaac tgtgcgctct ctggctagtt ctgaagttag 420
aggctatctc gag          433

```

<210> 619

<211> 309

<212> DNA

<213> Homo sapiens

<400> 619

```

gaattcggcc ttcattggcct agttcccgtt tgctctctgt cgctgtcacc gccctgtttc 60
tgtagccgta tggtagcctt gtgagaccgg ctgcccgtct acgtctcctt gcgatggagc 120

```

atattccggac gaccaagggtc gaacaagtaa aattacttga ccgattcagt accagcaaca 180
 agtcattaac aggaacactg tatcttacgg ctacacatct attatttatc gactctcatc 240
 aaaaagaaac ctggatatta caccaccata ttgcctcagt agagaaactt gctttgacta 300
 cttctcgag 309

<210> 620

<211> 320

<212> DNA

<213> Homo sapiens

<400> 620

gaattcggcc ttcattggcct actttccctta aagcccttca cccactgaag tcatccttta 60
 tgccagggtg gtaggaagta tgtaaccgt tggtacagta ctcatcacac tatatagctg 120
 ctatttgttt ttctttctgc ctgccagaca aggagctccc taagaactga acctcgtgca 180
 gaagacaaag cttatctggg agtcagcttt agcacagtac tgattgaaga ctacccttag 240
 tacatatgct tgtactctct ctcccttccc tgcctccagc cccaaatgac gcttcaacac 300
 ctaatacccg agatctcgag 320

<210> 621

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (491)

<220>

<221> unsure

<222> (507)

<400> 621

gaattcggcc ttcattggcct aggagatctt tatgaaacca gaccctgggt tctgcaatag 60
 taagataaact ggggaagttt tgggtaacta gaggatgaca tactaaaata gcagcatcac 120
 gaagggtgca atgaagtaag atcaagctaa cacgtcgaac tattctgtca acacctctgt 180
 gtcgtccatg tctataggtt gacaatggta aatggatgtt ccagcccaga tactctctga 240
 aatgacctgc agctttacag aagtaattct taattcatgc actcatcttt cccccagacc 300
 ccaaagggtg ccattccaaa gtatgtctgt ccagtgcagc tagcatgtgc tacaggccct 360
 gagtggagac ccagcttcgc ctcttttgct gagcaagttt ggcatgggtgc taacttctgc 420
 atctgtcatg cagccacact aacaatttcc acctgccta cctgaagatg ttgatgagaa 480
 tatcgaaaat ngtgtgtgtg tgtgtctgtg gtgtgtgtgt gcatgttaca 540
 tagtcaaaaga tagtcaacta agaacactgg cttgcagctc atttctact atggcattac 600
 attggagaag atgtcataga tttgtgtagt gatgacgagg gtccctgggt gtggcgggaa 660
 cctgggtgag tcttccaagt actggccgta ctcgag 696

<210> 622

<211> 599

<212> DNA

<213> Homo sapiens

<400> 622

gaattcggcc ttcattggcct aggttagggg aagatacatt agtagactga tttcaacctt 60
 acgaaaaaac ttaatttaat gcaatgcctg ggtatgtatc tgtggtatat aaagagtagt 120
 taagtcatct cctgtaacag gtaaatgaaa caagaagaca acaagacgtt gcaaaaactt 180
 gcaagagatg tgtcttacag gaaactagta gattagagaa tatgttttta aatctattat 240
 acctaaatct aaattaggcc atgaaggccg aattcggcct tcatggccta ctgcctcggc 300
 ctcccaaaagt gctgcaatta caggcacgag tcaactgcgtc tggccgagag tatgatttta 360
 gaaccagaaa aggacttaat atgtaaattc tgaaagtctt ggagatggat ggtggcgatg 420
 gttgcacaac aatgtgagag cactccatgc caccacagtg tgcactgaaa atggtaagat 480
 ttacactctg tgcattttac cccaacaaaa aaagagaaaa atccatccca tcccgtcatt 540

ctcctgggag aggccttcac caggccctgt gtggggcgca ggtctgcgct ggcctcgag 599

<210> 623

<211> 252

<212> DNA

<213> Homo sapiens

<400> 623

gaattcggcc ttcattggcct atagaagcct aaacataagt ggtaagtct tgtgtcttag 60
tctcattcac ctgcctcaac atgctttctt tcattctatt tgcatacaaa atgttcttat 120
ttcagttttg tagacaggat atgagttagc atactcgtgt ttgttcagct gtccatcctg 180
catcgttact acaatgcctt tttctgccat ttaatggtgt ttgtatcaat gttcccatat 240
ctgcacctcg ag 252

<210> 624

<211> 281

<212> DNA

<213> Homo sapiens

<400> 624

gaattcggcc ttcattggcct acagcacact gccttgcttc ccattactca caagaatatg 60
tttatttccc attaagggag acctctgcaa cttacagcta acctagtcta tctgaattct 120
tacctttttt tgccttctct ctcctctgce tgttctcccg ctgtccctt tcaagtgggtg 180
gcactttcag cctgacacct ggggtcctct tagattctgc aagccaagc agatctccct 240
ctatctacta tgtggagaga atgttatctg aatcactcga g 281

<210> 625

<211> 362

<212> DNA

<213> Homo sapiens

<400> 625

gaattcggcc ttcattggcct accggaggac cccattctgc ccctggtagg cccctggca 60
agttcgccta cgagtctcta aacggggtct ttctgactcc gaaactaaca gatcttgact 120
ccagaaaagc gtcctgcctg tcatttatga tatttgtgaa agacctagga acaactgaag 180
ctaacacctg agatactgaa ggccctggaag agttaggtac ggctgatgac actgttgaaa 240
agtcataaac gcaccaagt tgagcaagaa ctgtgttggc ccgtgtgtga gaaaaaatag 300
ccacgtccag actgggagaa ttactactt ccaaagacaa gttaatagaa gcggcactcg 360
ag 362

<210> 626

<211> 329

<212> DNA

<213> Homo sapiens

<400> 626

gaattcggcc ttcattggcct aatcgattag ccctcgccgg actcggactg caggaagtga 60
ttgatcggct gtttggttta ttgattcatt aactacggtg cctccctgac cttctgctcc 120
tcgccagcgc acaagctcac aatccacacc ctctaagag aacctgctct cgccatccgc 180
aggtctccct ggcccaatag tggggatata cctgagttga gctagaggat tttatccctg 240
ttgggatggg ggacgtctcg ggaagtgtgg tttctaaact aaaattgaca ccctaacatc 300
acaattaaca gaactagaga gagctcgag 329

<210> 627

<211> 498

<212> DNA

<213> Homo sapiens

<400> 627

gaattcggcc aaagaggcct aggaggggca ggagaacctg caggagatcc tcagcaagca 60

```

gctgcttctg tgtcagttcc tcatggcgct gtccattgtc cggacaggag gccacttcat 120
ctgtaaaacc tttgacctgt tcacaccgtt tagtgtgggg cttgtctacc tgctgtactg 180
ctgctttgaa cgagtttgtc tcttcaagcc tattaccagc cgtcctgcca actcagagag 240
gtatgtgggtg tgcaagggcc tgaagggtgg catagatgat gttcgggatt acctcttcgc 300
agtgaatatt aaactcaatc agctgcggaa cacggattcc gacgtcaact tgggtgggtccc 360
cctggagggtg atcaagggag accatgaatt tactgactac atgatacggc ccaatgagag 420
ccactgtagt ctgcagatca aagctctggc gaaaatccat gcccttggtc aagacacgac 480
taggcctctt tggccgaa 498

```

<210> 628

<211> 541

<212> DNA

<213> Homo sapiens

<400> 628

```

gaattcggcc aaagaggcct aaatatgtga caaccactgt gctgagctat gtatgcttcc 60
cttattcaat ctatgtaaaa attttgggga agtagctgag acttttttat tccctgaca 120
gagctgggat tcagtgtgtg gtttcttgaa aaagctaggt tctttgccta acagcagctt 180
agctcctcaa tttagggaat gaaagcagga atgaaaatgg ccagagtttt cgctcctcag 240
cttgtggagg agcttgagta catgaacctc aactaagccc ctaacatcag gaaggaaaat 300
ggaaaggaga atttttagac ctttaaagca gagaattac tgggtgaatca tgtagcaca 360
caggtacctt tagctttttc actgtgatgc tgtatgactt tctaaggtag tcagcatagt 420
ttgtagtaaa tgattcttat tactggaagt gtaagtggag tgttactcac tagttattta 480
aaaaacattt ataaggctat taaaacatca tctggaatta aagcagcata atttacccca 540
t 541

```

<210> 629

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (186)

<400> 629

```

gaattcggcc aaagaggcct aggttctgaa ggctaggggt gggctaccca tcccatggac 60
cagagtgggg acttgtgggt ccttttcttg gctgcccaca gaccaactgg catgcaccac 120
ctcccctgta aggcccataa aagcctcagg ctcaaccaga gcagggcaga ggaaggagag 180
acatcnggat gaccagctgt agagaggagc taccctctct agggcctcct ctctgctgag 240
agctgcaaac actggaatga cctgcctaca gagagaagcc acctgctcca gggcctctc 300
tctggtgtag agcaacagac atcaggacga ccaaaggcag agaggagcca cccactgcag 360
gcctcctctc tgctgagagc tgcagagaca atgggacaac ctggctgacg agaggagcca 420
ccactctag ggcctcctct ctgcccagag tcgaacactc aacaagatga cctgcctaca 480
gagagggaact gccactgca ggtctcctct gagctgctct gacactcagt aaagctcctc 540
ttcatcttgt acactctaca cttgtctgca tacctcaatc ttctgggacg caggacaaga 600
actcaggcaa aggtgccaca ggccacagag 630

```

<210> 630

<211> 377

<212> DNA

<213> Homo sapiens

<400> 630

```

gaattcggcc aaagaggcct aatcccagtc atctgttctt caatcccaa taggagaaaa 60
ttcagttttt ttataattga aaatggcatc attcttgac caggcagtat tgtctgggtg 120
ctaactccac atctcctcag acctccaaa tagtttctat aggactaaat ttacctetta 180
caggtgagtg gagtcttctt aggagacagg agttcaaaat cttgcccctt ttgctatttt 240
gaaaaacaac agcacactgt tgcccatcat aataaagagt atttgttagc taatagatgg 300
ttgtactgat ggcttgtttt tcattttttt tgtgcttttt ggtccatcta ttaataaaaa 360

```

tgaacccccgt aactgag

377

<210> 631

<211> 263

<212> DNA

<213> Homo sapiens

<400> 631

```

gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctcgattctc 60
cttccttgac agttgtcatt tacgtgctga agcatattga cttgaggaaa acgccttcct 120
tggagtttgg catgatgac atttttgctt atctgcctta tgggcttgca gaaggaatct 180
cactctcagg catcatggcc atccttttct caggcatcgt gatgtccac tacacgcacc 240
ataacctctc ccgctcactc gag                                     263

```

<210> 632

<211> 144

<212> DNA

<213> Homo sapiens

<400> 632

```

gaattcgcgg cgcgctcgac tggtattatt gttgttttgt cactaattaa aacaatgagg 60
ccccatgcac taggtcatcc tctgtctctc ctctttcttt cttacaatga gcttcttacc 120
aaaaggatga tgggacaact cgag                                     144

```

<210> 633

<211> 168

<212> DNA

<213> Homo sapiens

<400> 633

```

gaattcgcgg cgcgctcgac ctaaaccgtc gattgaattc tagacctgcc accgtgcccc 60
gccatgattt gcaaatattt tctcttagtc tgtggcttat cttttcattt tcttaacagt 120
gtcttttgca gagtggagggt ttttaatttt aatgaatcca acctcgag       168

```

<210> 634

<211> 204

<212> DNA

<213> Homo sapiens

<400> 634

```

gaattcgcgg cgcgctcgac gaaacagact cttccctagg ccctctggag taccatgctt 60
cctggctttc cttccaactc cctgaccacc ttctctcttc tctttgtgac ctcccattcc 120
tatgtctatc ctttctatat ttgtgatgct caagattcag tccaaggcct ccgttttcct 180
tactttaaaa acggaggact cgag                                     204

```

<210> 635

<211> 556

<212> DNA

<213> Homo sapiens

<400> 635

```

gaattcgcgg cgcgctcgac tagacctgcc tccagtatgg tggagggttt taattttttt 60
aatcatttgt ttgttttgtt ttgttttgtt gcatgtcttt agctctacgc tcatcgata 120
cattccctga cccagcccta gaatcagaca tttctccaag ggaccctagc ttattttatt 180
ggagaatggc attagaaacc aatatctgaa ttctgggtat tttattacta ctgggtcgcc 240
tttcctcaag gccactcag ctgacagagc aacaacatat atgtatctac gctaactgat 300
gtgcacacaa gtgtccataa atacctctag gtatatccat ctctattaaa gtaaatatga 360
gttcatattg atgtttccaa ctgtcaacct gtactacatg gatcattctg gcctccctta 420
caccttgac accggtactc tccaactccg acagtgaata acctagctga tgccataagc 480
tatctaattt atttaactgc acaattccag tatatatgta aagtggtttc agaattgcta 540

```

gccccgtaccc ctcgag

556

<210> 636

<211> 127

<212> DNA

<213> Homo sapiens

<400> 636

gaattcgcgg ccgcgtcgac actggaagga aatgagcatt tgtctaagga tcctccctgt 60
cctctttcag gcccttccct gcatgatctt catgcccaca acttgggcag gccagcaaaa 120
cctcgag 127

<210> 637

<211> 255

<212> DNA

<213> Homo sapiens

<400> 637

gaattcgcgg ccgcgtcgac ggtacattgt gaacttactt tcccctcatt atttatgaaa 60
ttaagcactt ctggtgttg taatttgat tttcactttt gtggattacc cacttatact 120
ctttattcat tttttgttg ggggatgcc tttgttattg ctttgaggag ctttatgcat 180
acaaatccat tatctaaca atgtgtttca aatattttat gccagtccct ctcttccctc 240
tcctccccc tcgag 255

<210> 638

<211> 290

<212> DNA

<213> Homo sapiens

<400> 638

gaattcgcgg ccgcgtcgat cgttggcagt gtgggtggtg tttttgttat agttgagggg 60
tcgctttcat atgctctcac caagtctaac tgactctgga agaccttttc tgaccaagtg 120
acaacatcac aacttttagca gccctcatgg actttctcat gtgcacaaaa ctcaaaataa 180
ttttatttat atttaccgct ttattgcttc ttcttgtctt cggcggtttt cattctcttc 240
tttcaaatag gctaggttag tttcatttct caagcgatca ttctctcgag 290

<210> 639

<211> 457

<212> DNA

<213> Homo sapiens

<400> 639

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt cttgacctgc ctcgaggtgt 60
ttgctgtgaa gatTTTTTaa aacatgcgg aaagatagaa agcaatcctc cttggcacgt 120
gaggagattc caaacttctc aatatagctt agttctccct gactgtgagg atgttgacga 180
aaactggatt ttttcaggaa gaaattagat ccagatttag cacttacgca tgtacacaaa 240
tatataaaaa cagtcggacc agggaaatgtt tctggcgatc tttgtcatct caaagtatct 300
gacgtttatt cagtggcggg ttctatttag tggattttat tattgcacat tgaagctcat 360
ggcaactgtt ttttaagact tgctctgcat tgtattccaa aacagttttc tctccgtctt 420
ttatttttta atgaactcat gtgtcatttc ccacccc 457

<210> 640

<211> 183

<212> DNA

<213> Homo sapiens

<400> 640

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagtgc 60
cggccagttt taccgtgtt tatgtttcct tttttctata gtgtttatcc cttagcgtgc 120
tatgtaatat atggatttac tatgcttatt gcttgtgatt tgtctcctcc ccattccctc 180

gag

183

<210> 641

<211> 322

<212> DNA

<213> Homo sapiens

<400> 641

```

gaattcgcg cgcgctcgac tgcacattca aaggataact attttatttt tggtaaat 60
acatttttaa cttgttgcta ggataaagt ataaaagaca tttagcccta attaatatc 120
tgccagtaaa atgaaacatt gttctgcctt ttcatttctg tatttaattt actactttca 180
gtactatggt ggcctgaaga catctaagct ctctcaagat acggagggtac ggttccatga 240
cattttcttc ctatctgtca gttttgaaac ttcaaatgcg tgtgagatac atgtgtcctt 300
aaaagagtct ccggaactcg ag 322

```

<210> 642

<211> 148

<212> DNA

<213> Homo sapiens

<400> 642

```

gaattcgcg cgcgctcgac ccgtcattga attctagacc tgcctcgagt gtggagtga 60
tactgatcag agctttacta gaatttttct cttctttttt aaaactaaaa cgtggaaaac 120
taagaagatg ttaagggtgg tctctcgag 148

```

<210> 643

<211> 326

<212> DNA

<213> Homo sapiens

<400> 643

```

gaattcgcg cgcgctcgac acctgtcatg tgtgcgcacg tgcattggtg tcgccgagga 60
gcggcccagg attgcgctga cccagtcctt ctccaagctc ttcaaggacc tgggcctgcc 120
ggcccgcgcc gtaagcacca cgttcgggtg cagggtcaac gtggccatct gcctccaggg 180
cacagctggc cgggacccca caaccgtcta cgtggacatg cgggcaactg gccatgacag 240
ggttcgtttg gtagaacggg gttctccgca cagcctgcca ttgatggagt ctggaaagat 300
cctccccggc gtgaagggtca tcatcg 326

```

<210> 644

<211> 130

<212> DNA

<213> Homo sapiens

<400> 644

```

gaattcgcg cgcgctcgac cccctctact acttttgaa taattttctt tcattttttt 60
tcctagctgt cccctggcgt cctcaccaac ttttcttaga gacatggtct cactctgtca 120
ctggctcgag 130

```

<210> 645

<211> 559

<212> DNA

<213> Homo sapiens

<400> 645

```

gaattcgcg cgcgctcgac ccatgaacag gatccgaaag tttttccgag gaagtgggcg 60
agtcttggca tttatctttg tagcttctgt catctggctc ctctttgaca tggcagctct 120
ccgcctctca ttcagtgaaga tcaacactcg ggtcatcaag gaagacattg tgaggaggga 180
gcggatagga ttcagagttc agccagacca aggaaaaatt ttttacagca gcataaaaga 240
gatgaaacct cccctaaggg gacatgggaa aggggcatgg ggcaaagaga atgttagaaa 300
aactgaggag agtgtgtctca aggttgaggt ggacttgagc caaacccaga gggaaagaaa 360

```


aatgcagaat gccctgggaa ggggcaaggt tgtgccgttg tggcatcctg cacatctgca 420
 gaccttcctt gtgactccta acaagcagaa gacagacggg agaggcacca aacctgaagc 480
 ctctctcac caggggacac caaagcaaac gacagctcag ggggctccaa agacctcatt 540
 catagcagca gcaactcgag 559

<210> 646
 <211> 215
 <212> DNA
 <213> Homo sapiens

<400> 646
 gaattcgagg ccgcgtcgac agtatgggaa atgttggatt tttaaaatgt tacacaaatt 60
 tctttatgat aggacttctc agagctttta gcattccta gtagagtgga aatgtgaatg 120
 gcaggattca gtataatcag caggtcccaa ctctatctga acacagaact cttgttctgc 180
 atatcatcga ttgacacacc ctggaacaac tcgag 215

<210> 647
 <211> 123
 <212> DNA
 <213> Homo sapiens

<400> 647
 gaattcgagg ccgcgtcgac ctctcggggc tatccccaaa ctgccacttt taactcttga 60
 agtaaataaa taatctttgc tggcaggact atgctgaatc tccttaggca ctatctactc 120
 gag 123

<210> 648
 <211> 149
 <212> DNA
 <213> Homo sapiens

<400> 648
 gaattcgagg ccgcgtcgac gggggaagta gaaagagagg cattccaggc atgactggag 60
 taaagaaaag gaacatgttt tgtttctttg agactgtaac cagcctttgt gctgcagcta 120
 tatttgtgga aaagatcggg ggcctcgag 149

<210> 649
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 649
 gaattcgagg ccgcgtcgac tgccgtggcc tgcttctga cccgcgggga cctctgggtc 60
 agctgggaga ggcgggtccg ggtattgat gagctgctcc tggatgcaga ttccagcgtg 120
 aacgcaggca gctggatgtg gctgtcctgc agtgctttct tccagcagtt ctccactgc 180
 tactgccttg tgggcttttg ccgtcgcacg gacccagtg gggactacat caggcgatac 240
 ctgcccgaat tgaaagcgtt cccctctcga tacatctatg agccctggaa tgcccagag 300
 tcaattcaga aggcagccaa gtgcattcatt ggtgtggact acccacggcc catcgtcaac 360
 catgccgaga ccagccggct taacattgaa cgaatgaagc agatttacca gcagctttcg 420
 cgctaccggg gactctgtct actggcatct gtcccttctt gtgtggaaga cctcagtcac 480
 cctgtggcag agcccagctc gag 503

<210> 650
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 650
 gaattcgagg ccgcgtcgac gagagtccgg agtgcctacc taaattacta agacaataaa 60
 ggacatacaa aagaagataa tcaaatgtta ctttgggtac ttgaacactt gctaagagca 120

tgcacccctgc agtcagtaac attaccatct atactcagag ggcaaacgct aatttcaa 180
 ccagagcaat gtcaaggatt tatcactgca acccaaagta tctttgctat caaagacagt 240
 gggggcataa aactcgag 258

<210> 651
 <211> 175
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (128)

<400> 651
 gaattcgagg cgcgctcgag tcgattgaat tctagacctg cctcgagtga gcgaaatcagt 60
 gaaaacgatg cttcatcatg ctcttctcca gtgtgcctgt ttccacaga tacagctttt 120
 attctgtac ttcttctcca ctccctctca taccatcccc acccacaacc tcgag 175

<210> 652
 <211> 197
 <212> DNA
 <213> Homo sapiens

<400> 652
 gaattcgagg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgt ctcaaaaaa 60
 aaaaaaaaaa agggagagaa aagaaaatgt tgtatatttt actttgcata accataattt 120
 atatgtcttt tggtctttcg tgggtgctcca tgaaaaaatt gactgcttta gctcacaact 180
 caactgccac actcgag 197

<210> 653
 <211> 206
 <212> DNA
 <213> Homo sapiens

<400> 653
 gaattcgagg cgcgctcgac aggtcgctcc atttcttga gtggacctt ttttctcaa 60
 atcacctaag aggaaaacta agttatttct gactttttcc ttactttat ttcccaaag 120
 ggaaaccagt catgaaattt aagacactct gtctacttag cattcttct ctttttatta 180
 tttccaccat gcccacatct ctcgag 206

<210> 654
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 654
 gaattcgagg cgcgctcgac tttttctttt tttttttttt ttatcctaga cctcaccctt 60
 ataactattg taggattacc actgtgaggg taaaaccgtg cattgagttg acattattta 120
 atgttaaaat tgattttttt aaatgatgtg gagcttttgg gtctatttgt ttattcgatg 180
 ttgctacaag tttgttactg tgagttactc gag 213

<210> 655
 <211> 207
 <212> DNA
 <213> Homo sapiens

<400> 655
 gaattcgagg cgcgctcgat aaccgtcgat tgaattctag acctgcctcg agtttttgg 60
 cttgagaaag acaattgtct gactctgcct tgtctagaga tatttgccat gggaattcaa 120
 tatttgaggt ctgtcatatc tttattgcc atgatgattg tatttaataa cttcgaagaa 180

aataaatgta tcccacaacc cctcgag

207

<210> 656

<211> 337

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (26)

<220>

<221> unsure

<222> (32)

<400> 656

```

gaattcgagg cgggctcgac cggcggncgg tngacdtgcc accccagggt gaatggcgaa 60
gccctccacc aacatggcag cccacagagg ctactgagga ggttggaggg ggcctcaggt 120
ggaaggatta gcctggccag gcacagagtc cctgaaaagg gatgagaagt gaagaaaacc 180
tgggataggg tggagtgaga gctcgccatt tctctgcca gcaggacgca agccatcttc 240
tgcaagcagg aggtggagaa gtgaggaagg gtgaagggtt ggcctgagta gtagtagtcag 300
tgtggggcca agaaaaggga ccagggacga tctcgag 337

```

<210> 657

<211> 199

<212> DNA

<213> Homo sapiens

<400> 657

```

gaattcgagg cgcgctcgac aaatgccaca tgtgaagatt ttcttgcaat ttgcctcgt 60
gttatccttg ctctctgttg tatctagagc cccagtcatt gtgtcattat gggactctaa 120
cagttgctgc tcaatgacac ctgcagacac tgagttcagc ttgtccctc cgctggatca 180
gtctccactc cctctcgag 199

```

<210> 658

<211> 335

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (297)

<400> 658

```

gaattcgagg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc actcgagtct 60
gggcaacaga gcgagactcc atctcaaaaa aaagaggtag atcagctctt gtcatttacc 120
tgctgtctct ggacttctg accccaccca tcgctcctct gctttgcttg atcccttcag 180
gcttctcttc aagtctctct gcaaagatgc ctgcctctga aactcaagt ggctccactt 240
gtccctcctt tccctgctg ttactgtacc tgctactgtc cccccagggg gagcttngcc 300
tctgtttgtc ttccatcccc agcaccaaac tcgag 335

```

<210> 659

<211> 152

<212> DNA

<213> Homo sapiens

<400> 659

```

gaattcgagg cgcgctcgac ttctctgcct cgagagtcta tagtatgcat cccattcatt 60
ttctctctct gattattgtc atctttccct ttgccaaatg ggcagttatt gtttcaggga 120
gagaagctgc tcattggcca atcattctcg ag 152

```

<210> 660
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 660
 gaattcgcgg cgcgctcgac ttgctttgaa gtaagtctca ataaggcaat atatttttagg 60
 gcatctttct tcttatctct gacagtgttc ttaaaattat ttgaatatca taagagcctt 120
 ggtgtctgtc ctaattcctt tctcactcac cgatgctgaa taccagttg aatcaaactg 180
 tcaacctacc aaaaacgata ttgtggctta tgggtattgc tgtctcattc ttgggtatatt 240
 cttgtgtaac tgcccattgg cctgaaaata ctcatgttaa gcctgaaaag ctcgag 296

<210> 661
 <211> 430
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (41)

<400> 661
 gaattcgcgg cgcgctcgac gacctgctc gaataagtgt ntattatacc ccaatattag 60
 aagggaagaaa taaaagtaaa agataaagca caccagtgc aaaatggata tgtttccac 120
 catgaatgca tatttcgttt gtggcagttt aaatattaca ctttgcttca atgctgtctg 180
 ctggttacaa atagcccagg gccctgctcc tgatcacagc tcaaaggaag gctgcctaca 240
 tttatgtttg tgccctaagt attgtataag tccatgccct gagatgttac tcatcccagt 300
 ttcgtgtttg ttggtaaaga gggagtgtga ccttgtagag tttcattct tctctcccat 360
 acattgactc atattggtga ttatgtcaaa aactacttaa tttgtataaa ggcattccca 420
 acagctcgag 430

<210> 662
 <211> 176
 <212> DNA
 <213> Homo sapiens

<400> 662
 gaattcgcgg cgcgctcgac gcattgtgtt taaatttaac attccttaga gaaacccag 60
 aaatctcatt tatttttggc agatatcctg tgcagcaaaa atcaagtga tttccctctt 120
 cccactcct caatttaatg ctgtactcaa aatggctaaa cgcaatactt ctcgag 176

<210> 663
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 663
 gaattcgcgg cgcgctcgac gtcgattgaa ttctagacct gcctctgttt cttctctcgt 60
 gtaatcgcaa aacctatttt ggagcaggaa ttccaatcat gtctgtgatg gtggtgagaa 120
 agaaggtgac acggaaatgg gagaaactcc caggcaggaa cactttttgc tgtgatggcc 180
 gcgtcatgat ggcccggcaa aagggcattt tctacctgac ccttttctc atcctgggga 240
 catgtacact cttcttcgcc tttagtgcc gctacctggc tgttcagctg tctcctgcca 300
 tccctgtatt tgctaccatg ctcgag 326

<210> 664
 <211> 201
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure

<222> (176)

<400> 664

gaattcgcg cgcgctcgac agtgggctg atggtcaggt ggctatcaga gggtaagcaa 60
aagatgtttg gtaaaagagc aaccccttgg ccccatctac caagaatgaa gaaagtaggt 120
gccatgttgt aatttcagct gacaagaagc attagcatta tcgcacactt tgtganttaa 180
gtaatgattt aattactcga g 201

<210> 665

<211> 132

<212> DNA

<213> Homo sapiens

<400> 665

gaattcgcg cgcgctcgac ggtggctact gtagatttga gctggcataa cacagtgtgt 60
tcactaagtt ttatgagcat aaacattaaa atgttacata aaatatacca taatttactt 120
cactcactcg ag 132

<210> 666

<211> 469

<212> DNA

<213> Homo sapiens

<400> 666

gaattcgcg cgcgctcgac accctattaa aaaggaggag ggcagtattt tgggattttt 60
aaggaccttg aaattaactg atagtttgaa acatatagca gagaactgat aatctttttt 120
taggtcatga aagtaaaatg ttttaagatac aatatttttg gtcttttttag taaaggcatt 180
tgttttcagt aaagatactt ctttttttaa ggagagaatt taggattacc atttggtaag 240
agagtatatg gaacaagaga tattaataag agaagtagag taatggaaaag atctgaaact 300
ggtattgagc tgtctcactc cgttgcccag gctagggtga agtggcatga tctcggctca 360
ctgcaacctc tgcctccttg gctcaggctg ggactacagt cacgtgccat catgcctggc 420
taattttttg tattttttgt agagatgggg ttttgccact agactcgag 469

<210> 667

<211> 140

<212> DNA

<213> Homo sapiens

<400> 667

gaattcgcg cgcgctcgac ctaaccgtcg attgaattct tagccgcctc gtcctgttaa 60
atttcaggat gtcaaacttg gcctcctttt tttggtttct atttttctta gtattaccag 120
ggtgtgcaga gcggctcgag 140

<210> 668

<211> 690

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (139)

<220>

<221> unsure

<222> (287)

<220>

<221> unsure

<222> (305)

<220>

<221> unsure

<222> (310)

<400> 668

```

gaattcgcgg ccgcgtcgac gaggattgat tcagttagcc gtcttggcca acccaagtta 60
actgtacttc atcttagtct atgttgggtg tagaacaac aaaaaggaaa aaaaaagcc 120
aaacagtaga gcaacaatnc attcattcat aaaagtaatt acatgccatc taactaatca 180
catggtaaat aatttaaatg gtttagaagg gtatgaaaga aaaagtccca cccctcttct 240
tcccagcctg tccccagat gtgaccactg ttaacatact tgtgtancct tctagatata 300
tatanttgtn tctttttaa aaaattatac agataggatc ggagttcaca ttttgttttg 360
catcctactt tttcacttgt tgataaacca tagaactctt ttcatagcaa cacatataga 420
tttagcatag tgttttaagt ggttcatag cattgatgtg ctctaagtta ttttaaccagt 480
cttctgttga tagctatttg ggttgccttct gttttttagg tattacaaat aaaaataaaa 540
aaggacatcc tgatagatat ttttctgcat agttatgcaa gtaagtccat gggatcaaca 600
tctatccatg aaatggctat gaattctaaa tttttatagg tgtttctgta ttgcttacta 660
aaaaagggtta tgccacttta cgtactcgag                                     690

```

<210> 669

<211> 403

<212> DNA

<213> Homo sapiens

<400> 669

```

gaattcgcgg ccgcgtcgac gaggtaggtt gcggctctgt agtagtatag tgatgccagc 60
agctaggact gggagagata ggagaagtag gactgctgtg attaggacgg atcagacgaa 120
gaggggcgtt tggatttggg ttatggcagg gggttttata ttgataattg ttgtgatgaa 180
attgatggcc cctaagatag aggagacaga atatgagtac agcggcagcg aggaggaaga 240
tgacagccat ggagaggaag gagagccaag ctccatcatg aacgtgcctg gagagtcgac 300
tctacgccgg gagtttctcc ggctccagca ggaaaataag agcaactcag aggcctttaa 360
acagcagcag cagctgcagc agcagcagca gcacggactc gag                                     403

```

<210> 670

<211> 441

<212> DNA

<213> Homo sapiens

<400> 670

```

gaattcgcgg ccgcgtcgac gttggatgaa gaaatggtaa aaactagagc aaaagtctta 60
aggagcatat atgaattcct cagtgcagaa aaaagggaaat ttcgttttca gttgcgaggg 120
gttgcttttg tgatggtaga agatgggttg aaacttctga agcctgagga ggtagtcata 180
aacctagaat atgaatctga ttttaaacct tatttgtaca agctacctt agaacttggc 240
acatttcacc agttgttcaa acacttaggt actgaagata ttatttcaac taagcaatat 300
gttgaagtgt tgagccgcat atttaaaaat tctgagggca aacaattaga tccaatgaa 360
atgcgtacag ttaagagagt agtttctggt ctgttcagga gtctacagaa tgattcagtc 420
aaggtgagga gtgatctcga g                                     441

```

<210> 671

<211> 175

<212> DNA

<213> Homo sapiens

<400> 671

```

gaattcgcgg ccgcgtcgac ggggagactc atagcacctt aacatgaata tgaaactttg 60
cttaaggga aaaaagaagg ctgggaaaag catttccatt ttgatgatga tgatgatagt 120
gatgatgatg atggtggtgg ctaacactta ccaatgcttc ctgagagctc tcgag                                     175

```

<210> 672

<211> 333

<212> DNA

<213> Homo sapiens

<400> 672

```
gaattcgcgg cccgcgtcgac gtcgacgcgg ccgcgaattc gcggccgcgt cgacacagtg 60
gggaaaacca tggaggccca cacatggatt cttcaacact atagcaaaaa tgagacacac 120
atcatttttg ctcagtttta ttggccagag caagtcttgc agcgaaagct aacttgaaa 180
agtaaagtct gatcatcctg atacctggaa taggacctcg atattggtta atagtcatac 240
acatttcatt gttgcatacc aacagacaca cactcacaca cgtatagaca tttagcctta 300
agttcaaata tgaaattgac cagaggactc gag 333
```

<210> 673

<211> 354

<212> DNA

<213> Homo sapiens

<400> 673

```
gaattcgcgg ccgcgtcgac ctctgtcgaa aaaaaaaaaa aagaaaaaga aattagcttt 60
ttccttgggg taaacccaaa aatattagag gtttggaatc aaatattatt ccattttatt 120
ggtttttaat cattttgtaa tatgaattat ttttgtgtac taataaaaaa aacaacatcc 180
cagaaatgtg agttttcttt aattattttg atgtccctct tgtggttttg attggctcat 240
ccccttactt cctatattgt cctttcaggt tcctacagtg tggggtcttg cagccagcct 300
gccctcactc ctaatgattc attctccacg gtaagaaaaa gcccaaccct cgag 354
```

<210> 674

<211> 291

<212> DNA

<213> Homo sapiens

<400> 674

```
gaattcgcgg ccgcgtcgac atcatgttct aacatgcttt ctcatgtacc tattttttat 60
gtttgtgtgt tattatcagt atcccttgct agaagcataa gctcactggg gcagggttct 120
ttgtctgctt tatttagtgg tgtataccaa ttgcctagaa cagtgcctgt aagagaacgg 180
tcctcagtga gttggatctg ccagggtggca tctggagtgg ttggtgcaga agtaaaagaa 240
atgatgatgg ctttggatgg attcacatat cagagcataa ggaatctcga g 291
```

<210> 675

<211> 159

<212> DNA

<213> Homo sapiens

<400> 675

```
gaattcgcgg ccgcgtcgac gagcatgagg agttattttc ttttcttttt cttttacttt 60
ttttttcttt ttcagacaag atcttgctgt ttcaccagat ctgcagtaca gtggcatgat 120
catggctcac tgcaagcctg catctcccgg tccctcgag 159
```

<210> 676

<211> 274

<212> DNA

<213> Homo sapiens

<400> 676

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gaattcgcgg ccgcgtcgac tgaattctag acctgcctcg agatctttgt gagagcagta 60
ttttctgtgt tttcttttta atttacagcc tttcttattt tgatattttt ttaatgttgt 120
ggatgaatgc cagctttcag acagagccca cttagcttgt ccacatggat ctcaatgcc 180
atcctccatt ctctctctcc agatattttt gggagtgcga aacattctct catcctactt 240
agcctaccta gatttctcat gacgagtact cgag 274
```

<210> 677

<211> 100

<212> DNA

<213> Homo sapiens

<400> 677

gaattcgcgg ccgcgtcgac cgggcagggtg ttaagtttgt gaaaagtgat gcaatttgtt 60
atacattcaa atgcaaatta gaactagcgc cttactcgag 100

<210> 678

<211> 473

<212> DNA

<213> Homo sapiens

<400> 678

gaattcgcgg ccgcgtcgac ggtatctagc cctagaatgc ctagaacagg aagaggcagc 60
tggtgttctg caaaacttgg acaggggcaa agttgctgaa aaagtttttg ttttaacccga 120
agataagtgg aaaagagctt gtccatgaac ccaggttctc actctgttta cagaagtgtg 180
ttgagtacag ttggtgaagg aagaggtaac aaaaaatgct aaatatattta tccatgaaaa 240
tgacttccag aaaaggaaga atatgaaccc cagaccgaag gggaaaagat agttaatagt 300
attatctaac ctgggttggt tttgtaatga atggtgattt taattagtca ttagccataa 360
tgatgtttat ttacagtata actcctgaat gctacttaaa taaaccagga ttcaaactgc 420
aagccagcca ggccgttcac tatttaaaac gttttaatcg gggctcactc gag 473

<210> 679

<211> 133

<212> DNA

<213> Homo sapiens

<400> 679

gaattcgcgg ccgcgtcgac tcgaggggtgc tgtgttcattg cgtgtgctgt gttgtgtgct 60
gtgtgtgtgt gtgtgtgtgt gtctggcaag caaggtcttg cacacacaca gcacttttggg 120
aggcctcttc gag 133

<210> 680

<211> 467

<212> DNA

<213> Homo sapiens

<400> 680

gaattcgcgg ccgcgtcgac cgatagtcaa ttccagaaac cgctatgaag ttccctctctg 60
caagagactt ccattccagt gccttcttgg gactgatgct ggtgacaacc acggccttcc 120
ctacttcaca agtcgcgaga ggagacttca cagaggatac cactcccaac agacctgtct 180
ataccacttc acaagtcgga ggcttaatta cacatgttct ctgggaaatc gtggaaatga 240
gaaaagagtt gtgcaatggc aattctgatt gtatgaacaa cgatgatgca cttgcagaaa 300
acaatctgaa acttccagag atacaaagaa atgatggatg ctaccaaact ggatataatc 360
aggaaatttg cctattgaaa atttcctctg gtcttctgga gtaccatagc tacctggagt 420
acatgaagaa caacttaaaa gataacaaga aagacaaaac cctcgag 467

<210> 681

<211> 361

<212> DNA

<213> Homo sapiens

<400> 681

gaattcgcgg ccgcgtcgac ccaggatgcc aactttgaat aggatgaaga ctacaacttg 60
ttcccttctc atctgcatct cctgctcca gctgatggct ccagtgaata ctgatgagac 120
catagagatt atcgtggaga ataagggtcaa ggaacttctt gccaatccag ctaactatcc 180
ctccactgta acgaagactc tctcttgac tagtgtcaag actatgaaca gatgggcttc 240
ctgcctgct gggatgactg ctactgggtg tgcttggtggc ttgctctgtg gatcttgga 300
gatccagagt ggagatactt gcaactgcct gtgcttactc gttgactgga gccactcga 360
g 361

<210> 682
 <211> 296
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (9)

<400> 682
 gaattcgcng ccgcgtcgac aacagggttga tgagctgcac tctgctgaaa ggagtctgca 60
 caatgaaatt tctcatgatg attgtgttct tacagggtatc tgcctgtggg gctgctccca 120
 tgaatgacag tgaatttgct gaatgggtact tgtcaagatt ttatgattat ggaaaggaca 180
 gaattccaat gacaaaaaca aaaaccaata gaaacttcct aaaagaaaaa ctccaggaaa 240
 tgacagcagtt ctttgggcta gaagcaactg ggcaactgga caactccgaa ctcgag 296

<210> 683
 <211> 536
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (112)

<400> 683
 gaattcgcg ccgcgtcgac ygcaacagca ccaataacag catccagacc attgattcca 60
 cccaagcact gttcctcccg attggagcgt ctgtctctct cctcgtcatg tncctcttct 120
 ttgattcagt tcaagtcgtt ttcacaatat gtacagcagt tcttgcaaca atagcttttg 180
 cttttcttct tctcccgatg tgccagttat taacaaggcc ctgctcacct cagaacaaga 240
 tttccttcgg ttgctgtggg cgtttcactg ctgccgagct gctgtcgttc tccctgtctg 300
 tcatgctcgt cctcatctgg gttctcactg gccactggct tctcatggat gctctggcca 360
 tgggtctctg tgttgccatg atcgccctcg tccgcctgcc aagcctcaag gtttcctgcc 420
 tgcttctctc agggcttctc atctacgatg tcttctgggt gttcttctca gcctacatct 480
 tcaacagtaa tgtcatggtg aaagtggcca cacagccagc tgacaatccc ctcgag 536

<210> 684
 <211> 136
 <212> DNA
 <213> Homo sapiens

<400> 684
 gaattcggcc aaagaggcct aggaaaaacta taaagggtggc cgtacttact aatattttca 60
 gatgcactat ttattttggt tagtttttct tactgtcttt tgtctattgc catgttccat 120
 ttccccaccg ctcgag 136

<210> 685
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 685
 gaattcggcc aaagaggcct acatgggttcc aagaaactgc ataagcatat gaaataagtt 60
 gcagcctccc gacttatacc ctgggtacttc tagtctaaaa caggatttga ctctactaat 120
 ccagccttat acaggatgct gtgttctttg ctcccttttg aatgtctgtt gctggtagct 180
 gggttatgctc atgatgatga ctggattgac cccacagaca tgcttaacta tgatgctgct 240
 tcaggaacaa tgagaaaatc tcaggcaaaa tatgggtattt caggggaaaa ggatgtcagt 300
 cctgacttgt catgtgctga tgaaatatca gaatgttatc acaaacttga ttctttaact 360
 tataagattg atgagtgtga aaagaaaaag aggggaagact atgaaagtca aagcaatcct 420
 gtttttagga gatacttaaa taagatttta attgaagctg gaaagcttgg acttctgat 480

gaaaacaaag gcgatatgca ttatgatgct gagattatcc ttaaaagaga aactttgtta 540
 gaaatacaga agttttctcaa tggagaagac tggaaaccag gtgccttgga tgatgcacta 600
 agtgatatatt taattaattt taagtttcat gattttgaaa catggaagtg ccgactcgag 660

<210> 686

<211> 381

<212> DNA

<213> Homo sapiens

<400> 686

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgagtct 60
 cagaagaaaa aacaacgaaa tatcttatgt taatctaaaa aaccttcagt gacctacttg 120
 atctcatttt ctaccatttt cctcctcttt ttctgaaata catcaacaca gagcactttt 180
 cctctccttt aatgcacaaa gatggcagga cttttgaatg ttacatttat ttatcttctt 240
 ctagagtggc ttctcttata caccatgtg acttgttcct cctctccttc tagtctttgt 300
 ttatatatat attattatca cagagggcta ggaaagaaaa caccactgc tgcgccccac 360
 actcatccac ctaccctcga g 381

<210> 687

<211> 202

<212> DNA

<213> Homo sapiens

<400> 687

gaattcggcc aaagaggcct atcgagggtt tgctggaaaa gtcgtgtgcc ctgcatttca 60
 gtaaatattg cttctttaag ggcagatacc tcagattgca acactcatgg tgttttcaac 120
 cttctgcata taaagtggga gcgtttacta tcttcccagt gcaaatcact tagacacaaa 180
 ggatgatata gaaagactcg ag 202

<210> 688

<211> 518

<212> DNA

<213> Homo sapiens

<400> 688

gaattcggcc aaagaggcct acttctatct atctcagacg ttcttttctt aaaagaagca 60
 agactcaggc acactgaagg tcatttccat gggacacact tgattgctta gaaaaacaaa 120
 tttgaaaaat actttcttca gaaggaaaga tattgtttct ccagggtaaa atattttctga 180
 gggcttgact ctttccaatg acgcctttat gtaagctggt ggagcagggc tcttaattga 240
 taagcagctg tgttaataat tcacaatgaa tagcatattt aaaacgtcaa cccagtgttg 300
 attcttatgg cagtatctga ggcgagagag accaaagcaa caatgacaat gaatctttag 360
 attctggaaa ctcaggagaa gccacactat ctctagagtc accaccttc ttttttaaag 420
 aaagagggaa gggtccctc tccaaaggaa agtttgcttc ccaggtaacc gtgatctttg 480
 tgacctatta ctgatttcgt ttaaacagag tactcgag 518

<210> 689

<211> 293

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (75)

<400> 689

gaattcggcc aaagaggcct agcacattta aatagccact atactctagc ctaggcaaca 60
 tagcaagacc ccatnttaaa aaaaaaagt atatataatt tcaactgaaac ttgccctaca 120
 agagtgggta taaattttta aaaattaggc ctaaaaaatag agtgatttct ttgtaattag 180
 aaattatacc tggattccat ttatctaaca tgctgctgaa gtattttgca agtatagtta 240
 cggtattaac agtgtgggct ggtgtaccat tattggtaag ggacaaactc gag 293

<210> 690
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 690
 gaattcggcc aaagaggcct aggggtagca aggaggtggc ggggcgggta aggggtacggg 60
 cagtgggtgca gaaggggaaga aggttggttac gcaaggagaa ataaaaagga acctgaaaaat 120
 aaaaaggagg gagggagaaa gcaagctaag ggtactgtta gtgctcctgg cactccgtcg 180
 tggggccagc gttgccttga gacctccac cctccctcag cctcaggaga attaggttcc 240
 agtccctcta ggaaggacag ggctgccagt gacaccagc aggaacaggc agtgcgcagg 300
 aaccctgggg cggccccagg gttgggggag ggaaggttgg ctggctagag ggcattgtgc 360
 caggagcagg atggggggcc aagctgggca gtgtccaggg tcagggcgag ggtggaagac 420
 cctcggggtc aagcacagca gagatcgctg gggcagttca ctagggtga ctgaaggtgg 480
 gaaaggaggg gtggctcgag 500

<210> 691
 <211> 568
 <212> DNA
 <213> Homo sapiens

<400> 691
 gaattcggcc aaagaggcct acatgtacct ccttctcata actatttctt tcttttgtgt 60
 ttttttcagg gctcagaaaa agctctcttg tagtctagaa gacttgagaa gtgaatctgt 120
 ggataagtgt atggatggga accagccctt cccggtgtta gaaccaagg acagcccttt 180
 cttggcggag cacaatatc ccactttacc tgggaagctt tcaggagcca cgcccaatgg 240
 agaggctgcc aaatctcttc ccaccatctg ccagcctgac gccacgggga gcagcctgct 300
 gaggctgaga gacacagaaa gtggctggga tgacactgct gtggtcaatg acctctcctc 360
 cacatcatcg ggcactgaat caggtcctca gtctcctctg acaccagatg gtaaaccgaa 420
 tcccaaaggc attaagaagt tctggggaaa aatccgaaga actcagtcag gaaatttcta 480
 cactgacacg ctggggatgg cagagtcttc acgaggtggg ctccgggcaa ccgcagggcc 540
 aagactctct aggaccaggg acctcgag 568

<210> 692
 <211> 307
 <212> DNA
 <213> Homo sapiens

<400> 692
 gaattcggcc aaagaggcct actcatctct actcatccct tcagccactc aaacctgccc 60
 ttctctgccc aggttctcag tcagaatgac cccagtggca aaatacgatt cagaatgttc 120
 ctgtggcata gtcacccagt tcccttttat gtctccattg ctactcactg ggctatacat 180
 taccagcttg atctcccatc caccaacacc tctggacact tctatcagcc atctttcagc 240
 cttgcttggt ttgcttccca gcctgggtcca ttgtttcaac aacgcttttg ctaacactaa 300
 tctcgag 307

<210> 693
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 693
 gaattcggcc aaagaggcct agttaggccc gacatattgt gagaaaatgt ctggtaacct 60
 ttttaacagg tgattgctgg aatttgatga ttgcctccgt aaatgtggag gcacagggga 120
 cccgtgtctg cccgcatgca ccctgctaac tggctgcttg ttttccggtg cagggtgcttg 180
 aggaatccaa agccctcgtg cgctgcaaca tgaagatgga gctggagcag gccaacgaga 240
 gggagtgtga ggtgctgaag aaaatctggg gctcggccca ggggatggac tccatgttaa 300
 agtacttgca gaggaagatc gatgagttct gagtgtcggg ctgcccactg gatctcgag 359

<210> 694

<211> 474
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (57)

<400> 694
 gaattcggcc aaagaggcct agagatagct gtatttgatt tacaatgaac aagattnaca 60
 aaaaggggtg ggggtggtctt ggaactgctc ccagtcctccc cggactgggt ggggctctag 120
 ggcagcctgt ctgacagacc aggaccccag gatgtctggg ccccgacgta ggacttgacc 180
 tacgtctcac ttgacctttg acgtggggcc cagcagccgt gagtccaccc agagtgcgg 240
 cacccttggg gaggcgggtg aggtcaggaa ggcatcgtac cgctttttct cctcctccca 300
 tctcgtggtg gacagacaga cataggatct gggaacttgc cctggggggc acaggccctc 360
 agatccccca gggggcccaac ctaggggcatg gaggcggctg ctggtgcgtg ggcggaggcg 420
 gaggccagct gccccagcg tggcagcgta aggcacattt tcaaatcact cgag 474

<210> 695
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 695
 gaattcggcc aaagaggcct aggtatttgt tgttccttta ttctgttgat gtgaaacatc 60
 atgactattg acttgcaaat gccaaaacat ccttctatcc ccgggacaaa tcccacgtta 120
 tattgtctgta ttatcttttt gatgtgttgt tggattcact ttgcttcgac tgggctcgag 180

<210> 696
 <211> 136
 <212> DNA
 <213> Homo sapiens

<400> 696
 gaattcggcc aaagaggcct acacgacagg aaacatgcag ttgggggatga tgctcaagtt 60
 gttcaaattg tttacttcta ctttgagtc ttcaattaag gtgccagggc tagtgactcc 120
 tgggaattgt ctcgag 136

<210> 697
 <211> 290
 <212> DNA
 <213> Homo sapiens

<400> 697
 gaattcggcc aaagaggcct aaagccagaa acctgtgtca tcttttcacc ccaccttcaa 60
 tcaacaagtc ctcaatcaac aagtcctact gactgcacat cttaaatata tctttatcag 120
 tccacaagtc cttccaatta tatttcccaa gtatatctag aacttatcca cttatatccc 180
 cactgctact accttagttt agggctatat tctcttgaaa aaaagtgtcc ttacttcctg 240
 ccaatcccca agtcatcttc cagagtataa tgcaaatccc attcctcgag 290

<210> 698
 <211> 152
 <212> DNA
 <213> Homo sapiens

<400> 698
 gaattcggcc aaagaggcct aaaattaacc aacctcaaaa attatatatt gaagcttcct 60
 ctactgtaag gaaatccatg aaactgttaa caactgttgc cttttggatg ttgccagtag 120
 cccttgggca gaacatgtct tttcgtcacc at 152

<210> 699

<211> 619

<212> DNA

<213> Homo sapiens

<400> 699

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gaattcggcc aaagaggcct aagtgttgt tcaaacagca gattcccagg ccttattttg 60
gcctaaagaa ccagagtcta ggtggtgga cataggaatc tgcatttcag taaactttac 120
acgtgattct tctgcacaca gtattgaaga gcaactagat taaattctag tttacaaaat 180
taccagtttt cttcaagaac taaatgatat gtcccttttt tttttttcaa agaggataag 240
gctgtatttt aaataaaata gctaaatgga gagtgagaag tggagcaggt tcattcagca 300
gcattcttaa ttgagccagc attgacaccc agccagcagg cctttgcatt gcattcgggg 360
accatgactc tgaatctgct taccaatcaa tctcgtttta atcaccaaaa gtgcagagca 420
ggcaaaatgc agctgtttat caatctcaaa agctttggga cagtgtcata gttgaaagat 480
gagacttaag aaaacagttt cttaaacttc taaaactta agaaacattg tttcataaaa 540
caatattgag tgggcattct tctgcacagt gtgatgtcc aaccctggcc ctagtctcag 600
tagaccatgc tgcctcgag 619
```

<210> 700

<211> 287

<212> DNA

<213> Homo sapiens

<400> 700

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gaattcggcc aaagaggcct aaagtactgt gtatggggtt tgctattcta aaaaacattt 60
ttatttttgg aatttttagtg gattttactt atccctcatt ggaagaatca attccttcta 120
aacctgctgc ccagacgcca cctgcattcta tagaagtaga tgaaaatata gaattgataa 180
gtgggtcaaaa tgagagaatg ggaccactga atatatcaac tccagttgaa ccagttgctg 240
cttctaaatc tgatgtttca cccataatc agccagcgcc actcgag 287
```

<210> 701

<211> 106

<212> DNA

<213> Homo sapiens

<400> 701

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gaattcggcc aaagaggcct actttaaaaa agagcacttt atcacgacaa aggggtgcaac 60
taacaattaa aatcagacaa tgctgtttct gcaccgcttt ctcgag 106
```

<210> 702

<211> 191

<212> DNA

<213> Homo sapiens

<400> 702

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gaattcggcc aaagaggcct aggggataat aagaaaaaag tatgtacatg tttagtgcag 60
gcacagctat cttttttttt tcaaatatth tcaatctaca gatgcagAAC cacagatata 120
gagggccaac tatatctgac tattttataa atacaaagca ggcaacaccc acaaagacat 180
atttactcga g 191
```

<210> 703

<211> 534

<212> DNA

<213> Homo sapiens

<400> 703

```
gaattcggcc aaagaggcct aatggaggaa gagacctgtc ccaatgtgtc attcggtaga 60
tctcactttc tcctagtacc tcatagtcat tcatttttca cccccaacag acaagtggag 120
actgatatta ttccctttta caatgtaaca aaatcaaagc ttagaaaacc aggggggtttg 180
gaaaataagg aatttgtgta ggattaaaat agaactttga gtcctggac tctgaatctt 240
```

agcttctacc ttgcacttaa ataaatttat gctaacagat gtcctgtcat cagataggac 300
 tttttttttt cttttttaatg tcggcaagtc tcattgttac agctctctgg tctgcccagt 360
 ttggttacac ctgttttgag attccttgcc tatacccttc caactgaaga caagcacttc 420
 ctactgtact tacagaactt tcatctatgt cttgggttaa tcttttgcct ttgttttaac 480
 cgtttaccac ttctgcttta tattggtagg taatcttacc cccaaatact cgag 534

<210> 704
 <211> 591
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (43)

<220>
 <221> unsure
 <222> (90)

<220>
 <221> unsure
 <222> (107)

<220>
 <221> unsure
 <222> (154)

<400> 704
 gaattcggcc aaagaggcct accaccagcc aaggcctagg agntgctgac ctggtcagcc 60
 ctcaccccag ccaggcagag agggcaaacn tgggggtccc cggcaantac gagattggaa 120
 aggttcacat gccctccccc atctgcccc ggcnttgcca gggaatcagt gggctcagaa 180
 ctggcaggcg gtgcaagctc tgcttccctg ggccacactg agggctgggg ccagctccct 240
 ggatgggggt ggagtttacc agcagcctgg ggacagcatg tctccttttt aggaaatgct 300
 cttggaggaa gagttcatgt gtggcgctgg tcagcagcta gtcccgcttc caggacactg 360
 gtcagagtta ccgatgaggc ctgggggctc ccgcttgtaa acccctccag ctccctcccat 420
 ctgcccagac agagcgacag atggcaccaa tgcattgctg ctccctcatt cctgcccagg 480
 ggctgtggct tacggccagc accctgtacc tgggactcag cccttatccc ccctctgcta 540
 tctgtgctgg gagaggggct tcggagggaa acagatatga ggacactcga g 591

<210> 705
 <211> 694
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (554)

<400> 705
 gaattcggcc aaagaggcct agttttatct tttcctttaa ttaacagtac tagtgacttt 60
 gtgaaagaat atgagttact atttaggtat gttactttaa ctacaatata ctacattgca 120
 gtatttctga aacctaggac atacacatta tatataacaa ctctatatatg aatatatata 180
 tacattatat tcattttaac ttttgaatct gcctatgac atgagttgat tgaaatatta 240
 tgtctttgct tatatcacc atcaccaacc tgctgcagtt aatctggtgc atctagtaat 300
 aatcattagt gctctaattt gctttttata ttatcagctt cagtattgtc tttagaggat 360
 tttagaattt tttaaagctc agacttagca aatgtaggaa agtgaaaact ttttttgaaa 420
 cttttttgtt ggtgtgacta atacaaagag gttcatattc aaagtgatct tgtttagctg 480
 accactcaa tatctgaaga acaaaagagg tgcatatgaa tgatctgtg attttccctt 540
 gtaggactgt cacngtctat atttgctttt aaaaatatga ccaaggggct acttaagtgc 600
 cacatgatct gaccaacaat aacaggctgc gtttcaaagg gccagtcttc tgaaaagcgt 660

aagacagtga attacctagt tgtccccact cgag

694

<210> 706

<211> 544

<212> DNA

<213> Homo sapiens

<400> 706

```

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgaggat 60
gaccttagag gagagaccag aagaagaaaa gaataaggag ctgcccagta cacacctgcc 120
caccaacgct gggatcctgg cggccaccat cattggatct cttgctgccg gggcccttct 180
catcagctgc attgcctatc tcctggtgac aagggaactgg aggggccaga gccacagact 240
gcctgctccg agggggccagg gatctctgtc catcttgtgc tcggctgtat cccagtgcc 300
ttcagtgacg ccagcacat ggatggcgac cacagagaag ccagaattgg gccctgctca 360
tgatgctggt gacaacaaca tctatgaagt gatgccctct ccagtcctcc tgggtgtccc 420
catcagtgac acaagggtcca taaaccacgc ccggcccctg cccacacccc cacacctgca 480
ggcggagcca gagaaccacc agtaccagga cctgctaaac cccgaccctg ccccttact 540
cgag

```

544

<210> 707

<211> 181

<212> DNA

<213> Homo sapiens

<400> 707

```

gaattcggcc aaagaggcct agtgggaattg gaaagggtgg tatctgattt ggttgttcag 60
gcaaattatt ctgctgctga tttaacaagg tgtgctgctg tgggaattgga aagggtggtc 120
ttggtagctg ggggaagggga tgaaagtggc gattagggat tgcatactgt gcggtctcga 180
g

```

181

<210> 708

<211> 103

<212> DNA

<213> Homo sapiens

<400> 708

```

gaattcggcc aaagaggcct agttagattt acttaaaagt ttgaaagctg cttgtagaga 60
ctacaataca atggtaaaac tttttccac aagagcactc gag

```

103

<210> 709

<211> 463

<212> DNA

<213> Homo sapiens

<400> 709

```

gaattcggcc aaagaggcct agtgacaggc agccttagtg agaatgaccc acttcgtttt 60
aagcctcatc ccagcaatat gatgagcaag ttgagctctg aggatgagga ggaagatgaa 120
gcagaagatg accagtctga ggcttcaggg aagaaatctg tgaagggagt gtctaagaaa 180
tatgttcctc caccgttggg tccagtacat tatgatgaaa cagaagctga gcgggagaag 240
aagcgtctag aacgagccaa gagacgggca ttgagcagct ctgtcattcg tgaacttaag 300
gagcagtact cagatgctcc agaggaaatc cgtgatgctc ggcaccccca tgttaccgc 360
cagagtcagg aggaccaaca caggattaac tatgaggaga gcatgatggt gcgtttgagc 420
gtcagtaagc gagagaaagg acggcgaaaa cgagcggctc gag

```

463

<210> 710

<211> 167

<212> DNA

<213> Homo sapiens

<400> 710

```

gaattcggcc aaagaggcct atttttgttt attcttccat agtctagatt tgccaaatga 60
aggcttttga cttcttcttt ctgaatcctt ctgactttgt ggtggggaaa gaagatgatg 120
aggcaggtcc atccacacagc tggaggcttt ctgagagcag tctcgag 167

```

```

<210> 711
<211> 112
<212> DNA
<213> Homo sapiens

```

```

<400> 711
gaattcggcc aaagaggcct actgaggag gctgcagggc tggctctaga gtttcctttt 60
tcagtcttaa cctggtgacc agcttccaca gaaattggca tgggtgactcg ag 112

```

```

<210> 712
<211> 418
<212> DNA
<213> Homo sapiens

```

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<400> 712
gaattcggcc ttcattggcct atttttagta attgtacatt tttcattcta gagttttcta 60
taaatttgag gcttgccctt tcaaaaaaga aactatgcag ccattgaatg aaatgtcttt 120
ggggtacggg gtgactggaa tgtttgttag aaattgttc acactatcaa atattgatat 180
cttggagcca gcagaagagc agattttggg aggtggtaat aacaaaattt aatttcttcc 240
caacaactta attttctcat ttattttaca gaatagtagt gaaatatttg atgaaacttt 300
gtattttggg agcactacat agaaaatgtg ttttagattt atgatgatca tatttctcac 360
caatgtaatt tcagtctcag cagtgtttt caaacttagg gaaagggaca gactcgag 418

```

```

<210> 713
<211> 305
<212> DNA
<213> Homo sapiens

```

```

<400> 713
gagcatatth ataatagctt tttaaaaaag tttttgtttg ctatttccaa catctttgtc 60
atcatttggc ctgtttatat tgactgactt atctgtctgag tatgggtcac agcttccctac 120
atcttaacgt gtttagacac tttttattct atgctacaca ttgtggatgc tacttttttg 180
agattctagg ttcattctgt ttgaaacagt ttttctcccc tctttttgtt gggctgtcag 240
ctgttacttc ttgtagctgt cagaataactt gcctctggct actatattct ccaccccccc 300
tcgag 305

```

```

<210> 714
<211> 316
<212> DNA
<213> Homo sapiens

```

```

<400> 714
gcgattgaat tctagacctg cctctccccg tcgactgtct tcttttaaag caactgcaat 60
ttcttccctt acttctctac tgtctgttgc tataatttgc ccatttgtga ccatctgtga 120
attctgtctt aggtattcca tgaatccatt cacatcttca ttttaagtact cttttttctt 180
tttgttcttt ttatgttttg cttgggggtgc atcattttg agggatagcc tattggcttc 240
aagttgttta cgcttttgta ggttttggct tgttccctca aaggatccct tcttcatgct 300
ctcccatgaa ctcgag 316

```

```

<210> 715
<211> 374
<212> DNA
<213> Homo sapiens

```

```

<400> 715
gaattcggcc ttcattggcct agtgagaagt accatattat tcccttatac tatataatat 60

```



```

aaagagaaca ggtattcaaa ctggaatata aaagtaatga agccttttta tgcattgcac 120
tcatcattcc ctccctcaga ggtggtgacc tgcagccatg atggaaagtt ctctctgccc 180
ctctgccctc tgaggatcatg tctggatctg tgccattaga acttgggcct gttgggagag 240
gaggcggagg cctgaaagca gtttacataa agctttcagt aatggttggt ttttaaagag 300
gcttgctatg tgctggtagc ttctttgtgc atcttgccata gacaattaaa aatatttgct 360
ccatgtccct cgag 374

```

<210> 716

<211> 369

<212> DNA

<213> Homo sapiens

<400> 716

```

gtcttttttaa ggaagggtgct gctccactgg tgctgctgtt ggctcctggt tccactcagc 60
tcaaggaccc agaagttacc caccgggat gaggaacttt ttcagatgca gatccgggac 120
aaggcatttt ttcattgattc gtcagtaatt ccagatggag ctgaaattag cagttatctc 180
tttagagata cacctaagag gtatttcttt gtggttgaag aagacaatac tccattatca 240
gtcacagtga cgccctgtga tgcgcctttg gagtgggaagc tgagcctcca ggagctgcca 300
gaggacagga gcggggaagg ctcaggtgat ctggaacctc ttgagcagca gaagcagcag 360
atcctcgag 369

```

<210> 717

<211> 587

<212> DNA

<213> Homo sapiens

<400> 717

```

gaattcggcc ttcattggcct agggacatct tgggtgagatt taggtgaata atagtttaaa 60
aatagcaaca ccagctgcca ttgacagagc ttgcaagcca ggcccttccc aagtgtgac 120
gcatttcac ctcaggcaac tttatggggg aaacaattat tgteccggtt ccagatgag 180
gtaactgagt cctcagcatg ttttcagcca gcctcacagc tgteccacc cctggcctcc 240
aaacagaggg gctggcttac catttccaca aagcagtgtg aagctggaac aggtgaggag 300
ctctgagttt cggccgtgtg ctggggagtg ggctcaggag acacgtggg ctgtgggttg 360
gcacactgaa aggtacagc cggtctgagc acagcaccct ctctgggctg gcaacagagc 420
cgtccacccc acacctgtag gtatgccaac gagggccggc tgaggccatc tgcagcctgt 480
gtgctgccag cagcgggagg aggcagggaag gggcctcctg cccggtgccc cctgctggcc 540
aggctcccc cactccccac agggaggacc tccccaccct cctcgag 587

```

<210> 718

<211> 599

<212> DNA

<213> Homo sapiens

<400> 718

```

gaattcgcc tcatggccta cctgcctgat ggctctcctg acaaagttac tgggcccagc 60
aaaaggaaaa gggaactgct tgttcaggcc catcgagac gtaaaatata ccctcttgaa 120
aaaatagaca taacaaaaac ttaagtaaaa aaaataaata aaaagactaa atgtgcatgt 180
ttgagatttt tgccttgtg ccctttttgt gtccatgggc ccattgtgtc gtggagtgg 240
tctgaccatt ccaggatga tttaaaatca cccctctgca ctttgaatg ttggggacag 300
agctgtttcc ttcagactca tttagaaatg accagccaac tgtggccatt ttcttctcct 360
ataaaggctg gggttctaag catttgtttc atgggtgaaa gtggattcaa cctgctcttc 420
ttcttctg ctagtcactt ttttttactt ctacctctgc ttactcagct gtctaaaaac 480
gaaaaatgct cattctgac cacaatacta gccatttctt gaagacattt tttttactca 540
atcttaaat gatcacatgg ctctgttgtt cttcatttgt tttctgcaat cctctcgag 599

```

<210> 719

<211> 508

<212> DNA

<213> Homo sapiens

<400> 719

```

gaattcggcc ttcattggcct agcattgttt agcttttaaaa tgcattctctc tgagcttttc 60
tccccattaa caccagctgc cttacatcct cttcttacc ttgattttta tcccatcatt 120
gatcctgctt cattcccagc agtcagcccg tcgcaggcac cgagagggtca aggttcttgg 180
gtccacaata tttccagact ccacacaacc cttcagggtcc tggcctgggc aaccagctga 240
tgcggtgagc ttttctcatc atctcctgtc ttactttcag atctgtcgc cactgtgagg 300
ggattcctgt ctcacccatt gcctctctgt ggggtctttt tggacttggt ttagccacag 360
agcattcctt gtcagaaatc gggaaactac tatgtgttac ttactgtccc ccacttcccc 420
caccocgggt gtctgagaaa ctctcagggg tcctcaaaga acagtttgaa aagccagtct 480
ctttgcccc acatcagcct gcctcgag 508

```

<210> 720

<211> 358

<212> DNA

<213> Homo sapiens

<400> 720

```

gaattcggcc ttcattggcct actctttcaa atagatttca ggcctctaga gtctttcaac 60
cctcacattc aggaataatt ttatgtaaat tttcatgctt tataatgttc ttactttttt 120
ctattcaatt ttgtctatat attgatgatt aagatgtatt ttatttatt ttatccatag 180
ctttttccat ataagtatgt atcttagggg cagaactgct gaaagagaca aactcagcca 240
aaaacacttg gaaagcatat tttggtatct gcattgcttt gcataatctaa attttcccat 300
aaagtaataa agtaaaatgg ttgcagcagg aaagaagttc atcttcattg ctctcgag 358

```

<210> 721

<211> 298

<212> DNA

<213> Homo sapiens

<400> 721

```

gaattcggcc ttcattggcct actttgtcct tgtttgtttt ctttcaatag tcagggtccct 60
cttccatagg gctgctgcag tttgccgggg gttcacttca ggccttattc atctgattca 120
ctcctgtgcc tgcagatatg attcaaggag gctgaagagc agcaaagatg ggtgcctgct 180
ccttcttctg ggacctctgc ccttgagggg gactaagctg atgttagtag gatcgctcct 240
gtataggggtg tgtctgacaa ccccggttgg aggttctcac tcagttgggc ggctcgag 298

```

<210> 722

<211> 488

<212> DNA

<213> Homo sapiens

<400> 722

```

ggttttgcat ttaaattttt ttagaaagca gaatcttaac ttatcttaat gatatttacc 60
tattcctttt gcaactcaca actgactttg tcacagaggg aatgcatctg cttgcaggaa 120
gtagctgtag gctcagtacc tgttgtttga gtcagattta gcagatttgg tttttaagct 180
tgtgggtttg tgctaatttg ggcagaatat atttattata tatgtgtgtg tgtatgtgtg 240
tatgtgtgtg tctgcatatg taatacatgt acataaacac acatgcatgt gttcatcctc 300
tgacacaccc acacaacacc aacaaacatt tcttctatag gctttttatc tcaactgaca 360
ctgttttttt tcccaataaa atttgacaca ggcagaaagg tgggtgaact ctcagaactt 420
ttgggtgggtg gatattcatc tgaccagtga gctctgaaat gggttcccta cacagagtgg 480
ccctcgag 488

```

<210> 723

<211> 406

<212> DNA

<213> Homo sapiens

<400> 723

```

gaattcggcc ttcattggcct atgctcaagg aattatagga ctaattctct ttttgttgtg 60
tgtattttat tccagcatcc gtacttcaaa caatagtcag gtaataaac tgactctaac 120

```

```

aagtgatgaa tctacattaa tagaagatgg tggagctaga agtgatggat cactggagga 180
tggggacgat gttcaccgag ctgtagataa tgaaagggat ggtgtcactt acagttatct 240
cttctttcac ttcattgcttt tcctggcttc actttatata atgatgacct ttaccaactg 300
gtacaggatg gaacctcttc gtgagatgaa aagtcagtgg acagctgtct gggtgaaaat 360
ctcttccagt tggattggca tcgtgctgta tgtcttgaca ctcgag 406

```

<210> 724

<211> 332

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (121)

<400> 724

```

ggctgttgat atctacatta atgactatgt ctatgtctat gttgctgttg atgtctgtgt 60
ctctggctat ggctatgtct atggctatgt ctacgtcact gttgatgtct gtgtctgtgt 120
ngatggccgt gtctatggct gtggctatgg ccatgtctag gtctatgtct acttctatgt 180
tgctgttgat atctacatta atgactatgt ctatgtctat gttgctgttg atatctgcgt 240
ctgtgttgat ggccatgtct atggctgttg ctatggccat gtctaggtct atatctactt 300
ctatgttgct gttgatacct acatttctcg ag 332

```

<210> 725

<211> 302

<212> DNA

<213> Homo sapiens

<400> 725

```

gtcaacccaa cacaggcatg ctcatctgga aaaagttttt gtctcgccca gccttgccat 60
ttatcctaag gctgcttcgg ggccctggcca tccagcaccg tggcaccag gttctgattg 120
gaactgattc catcccgaac ctgcataagc tggagcaggt gtccagtgat gagggcattg 180
ggaccttggc agagaacctg ctggaagccc tgcgggaaca ccctgacgta aacaagaaga 240
ttgacgcagc ccgcaggagg acccgggcag agaagaagcg catggccatg gcaaaactcg 300
ag 302

```

<210> 726

<211> 588

<212> DNA

<213> Homo sapiens

<400> 726

```

gaattcggcc ttcattggcct accagagcat cacagtggcc attgatgtag tctcccagca 60
cctgatgatg caacgcaagg gtgagaaaat gggccgcttt cagggtcggg ggaaccaga 120
gggacaaggg gtagttgcct ttggccaaac caaggacatc atcaggcaga tcctgcaggc 180
tgatggactt cgcggcttct atcgaggcta tgtggcttca ctgcttacct atatccaaa 240
cagtgtgtgc tgggtggcct tctatcactt ctatgcagag cagctctcct acctgtgtcc 300
taaggagtgc cctcacattg tctttcaagc tgtctcgagg cccctggctg cagccactgc 360
ctccatcttc accaatccca tggatgtcat acgaaccctg gtgcaggttg agggcaagaa 420
ctccatcatc ctgaccttca gacagctgat ggcagaagaa gggccttggg gcctcatgaa 480
gggcctctcg gccagaatca tctcagccac acctccacc attgtcattg tgggtgggcta 540
tgagagcctc aagaaactca gcctccgacc tgagctggtg gactcgag 588

```

<210> 727

<211> 290

<212> DNA

<213> Homo sapiens

<400> 727

```

gaattcggct tcattggccta taggcatga aggccgaaca aaacagctgt atgtaatcat 60

```

```

tgccactagt tccatctaga actcctttct agtttggtat ttttaaaatg tttatacata 120
aaaccaccaa aatacatagc ttcgacaaga tggaaagttta tttctctctc ccataacagt 180
gcagtgatag tcagctggtc caggccaggc aaggggctgg tccatgatgt catcaggcac 240
ccagggttcct actgtcttgc catgtggcca cagttagcaa cttgctcgag 290

```

<210> 728

<211> 366

<212> DNA

<213> Homo sapiens

<400> 728

```

gaattcggcc ttcattggcct aggggggattg cagagctgtg atcagagcct caatcagagt 60
ctgggcaggga gggtcggagg gcagaagtgg aagctccctc tgccctgcac cagccttctg 120
aaacctctctg tggacggagt cactctggat aagggatgga cggcagggtga acataagtcg 180
tgcaactctga gcttctggga gtcccaaggc acagaggcct gtactgcctg gcaagcctct 240
gccctctaaag ggcagcagac aggggaagaca gtggtgtgga gggcccagat ccaacttgcc 300
tcctgtccac ggagaccggc ccagctatgc ctggggaagg ggctctgctg atcagagtcct 360
ctcgag 366

```

<210> 729

<211> 388

<212> DNA

<213> Homo sapiens

<400> 729

```

gaattcggcc ttcattggcct aattgaattc tagacctgcc tcgagacatg cccgggtcgt 60
gaagggtccct ctacagcggg gccggggagt ttcccgcg cgaagacttt gaggccttgg 120
caggacaatt gtcagcgtag tgacctctctg ttccacagta gaggcacagg ttcagctttc 180
tgcgctcttcc tttttcttcc tgcgtcaggc gcatgcgggc acctcccacc ggctcgggtg 240
gatctacctg gtggtggcct gcaatgtgag gcaacaccag cgcccggggt ggcgagcgtg 300
gcttgcgagc tgcagcagcc ctggccagcc ttctctcaat gtgaatgcac tgcccaatca 360
gagcagacag cgacttggcg acctcgag 388

```

<210> 730

<211> 351

<212> DNA

<213> Homo sapiens

<400> 730

```

gaattcggcc ttcattggcct atgactgaat ctattttaag atctaaatta gcatctcttc 60
agacacacgg aacagctgct catttcaatc actcttctca tggagaaacc gaagaccaga 120
ggggacaaga ctagtccaag ggcattgggga gtcattgggta ggctgggggt ggaattgcaa 180
tgtcttgact ttcccgtca gcacactttt gtgtaccggg taaaaaccac taccaccatc 240
atcattgcca ccatcactac catcatcagc actataatca tcactaccac tatcgtcacc 300
atcatcacca tcacatcgtc atcaccacca ttatcaccat catcactcga g 351

```

<210> 731

<211> 401

<212> DNA

<213> Homo sapiens

<400> 731

```

gtcgcagcct tatcaccatt ttgttctttt atagttgcta atgttttagt cagtcgcgca 60
cgctcaattt caacataaat cttgccttcg gtaaccattc gtagagtac aattaatcga 120
agtttgatag gaaggtctgt gatttctca acataagtac agcactgttg aaccattttg 180
gcaacagcct gttttaactg actccgcctt ttggacaaaa gcataatatt ttcattaaat 240
aaatcccatt ctttagcttc atagcacatc ttactactg caactaagat acgggatgtc 300
gataccatat cggaagcagt acgagtctgc ttttcagag agagaagggt ttcaatgact 360
tcttgaagtc ttccttcctt ggctagcttc gcacactcga g 401

```

<210> 732
 <211> 278
 <212> DNA
 <213> Homo sapiens

<400> 732
 ggtccgtagc tcatgctgta acattactct atcaatcaac agtgctctga tatgttggtt 60
 ttccccatgg agccgatttt ccattgattt ctttactaag ttgaagcttt tccatcgagg 120
 gtcaaattca tgcttgtag atccttgga ttgtaaaagg tctccaataa tctttataat 180
 aagaaacaat gacttagtat catcttctga attatcaagt atgtgggtta gaagtttcct 240
 tataactgta gcaattactt ctccgtgggt ctctcgag 278

<210> 733
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 733
 gggccctcat caacttcttt gtgtggagct cccagggtta aaagaccatt atcgagtgc 60
 tgtatatagg ttccctcatc catttcaatg gctatgggtc ctgaaatttc accaaagttt 120
 gttaactgtcc accagattcc aacatatcaa gctgggttct tcatcttct tctcttttct 180
 tttcttctat tttgttcttt ttcttcttac tgccacttat tctggcatcc tcatgagccc 240
 agactcctcg ag 252

<210> 734
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 734
 gaatgctgag tctggggaca ggtagagaat ctcttcaaga aaaggaaaaa gcctccagaa 60
 aaggaaagctt tggagagatg ggggaacaaa ctgtgaaagc agtgcagaaa ttaagtcaac 120
 agcaggagtc agtttgtccc agggagagca cggtccttgg gcaactccagc ccatgtctag 180
 acaattcctc atccaaagct ggtagccaat tcttatgcaa tggaggaagc agagcaacgc 240
 aggtgtgtcc acaggaagat ctccagcccg aggcacagga agcaacacct gccaaaacag 300
 aaatctgtcc ctgggaggta aatgaaagaa caagtctcga g 341

<210> 735
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 735
 gaattcggcc ttcattggcct aggtggtagt atagaaagg gatataaacg aaaaaataaa 60
 tactgaattg ccacatatat agagtctgtg ttaaaattgg aaagatgtta gatgacttca 120
 taattttggt attgttctct caagtcaaaa cagcgtgttg cttccaggat tttggtgaac 180
 acagcagtggt gagttgcagt gcttcgggtg tcatagaaga atttcaaata cttcagagca 240
 ttcgttttca tggaaacctt cctctcccc tctgag 275

<210> 736
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 736
 gaattcggcc ttcattggcct aagacctgcc tcatctcctg gcctctgagc ttttcctgc 60
 ccattcatc tccatccaga gccaggcac caattctatc ctgacagcct tctgctagag 120
 ccatggctta gagatctcat ttggggatac acgtttgttg tggggccatc atgtgtggct 180
 gcatggagtg accgaagtga atcatctgcc tgcaagcgtt tacactcagg tgagcacaat 240
 tcacatactc cttggccttag cacatgtcac caaacttaca tacgtcgaac ctcgag 296

<210> 737
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 737
 gaattcggcc ttcattggcct agtgccagct tgctaatttt cacagaagtt gatggcaatt 60
 cttcacatgt aaacagtgcc agtccacaga acctttatat attttttgaa gccagtactg 120
 tgctctgcat ataacaaagc tgcttcaagg atgagacctt tttctaaaag catgtaatgt 180
 gagaagccgg cctgccttat tttctttttt cttttttaat gattaaaaat agtttgtggc 240
 aaggcacggt ggctcggcct cctgaggtgc tgagattaca ggcttgagcc actgtgccag 300
 cttgctaatt ttcacagaag gctcgag 327

<210> 738
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 738
 gaattcggcc ttcattggcct aggtcttttag gagttgctta ataattccagc caacataaca 60
 ttattttcaa gggaaacctt ccagaatgcc aaacactgcc ttatgagcta ttggtaactt 120
 aacttttatt tatttgagta tcacacttca catataaatt attcacacaa atactcttta 180
 gtcagttaac acagtgttgc tggagatctt acagcagtc tcgag 225

<210> 739
 <211> 447
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (105)

<220>
 <221> unsure
 <222> (244)

<400> 739
 gtttcctgtt catttcaggt gttttattga gcatctgatt tgtgtcagca ccatgtaaat 60
 atgatgagga gtatttgga tagactttac attcaccaga aaatngatag tatttgtaa 120
 accaatgcat ccattcaaaa tagaggcaga gtaaacagcc taagaaatga tttcctttct 180
 acagtctgct aggagaaaga ggtgagaggg gagtgggtga tgattttaat caagagtaaa 240
 gggnacattt attacatgaa atctgacttc agttgtgcaa aggtatgta agacattaag 300
 acaattgctg gaaggtttca aatatgtgta cacacacata gagctacttt tgtgtgttta 360
 tttatatgta tttttcacia aggctaagtc ccacagagga aaatgattat ttttaacttct 420
 gggttatcat ctgcgacggg tctcgag 447

<210> 740
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 740
 gaattcggcc ttcattggcct acctttttctt tagatgtgta cctcatttgc tgaagttgtt 60
 ttctgcctta aatgagattc acattcctca agagtctgcc catcctttga ttgtatatgc 120
 atctttctca ttgaaattca ttgttatact ctctcctgct tctgttttagg cagtctgctt 180
 gggaagggga ctaagacttg ccatgggagt tttgactcag gattttcagt gaaagtagag 240
 gagtgtgtag aaagtatttc tgggctggat atcctggaga ctgctctact aggaatgaat 300
 gcttcctttt tttcccccag cacttgccct gcctcgag 338

<210> 741
 <211> 307
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (152)

<220>
 <221> unsure
 <222> (161)

<220>
 <221> unsure
 <222> (177)

<220>
 <221> unsure
 <222> (268)

<400> 741
 gaattcggcc ttcattggcct acttgcagtg aagcagagat tgtgccactg cactccagcc 60
 taagcaacag agcaagacac cggctcagaa aaaaaaaaaa atagttacaa agttgcagaa 120
 aattttaaag agttgctcag aggcctggag cntgaaaccc nataaaaatg gaagttngag 180
 tgcgtgtcat tttcttccaa gctagttaat catttctcat taagttctac atttagtttg 240
 taatgtgcat gttttattta tagctcangg tgataaacia gacaaagtca agcagaaaagc 300
 gctcgag 307

<210> 742
 <211> 487
 <212> DNA
 <213> Homo sapiens

<400> 742
 gaattcggcc ttcattggcct aggcgggcttt gagtcacatg gatcagcttg acctccagtg 60
 gggctggaga ctaagggttag ccacatgggc atgcaacat ggaaccccag taaaaacgtt 120
 ggacataaaa aatagagtga gcttccctgg ttggcaataa tccatgagta tggtcgcaca 180
 ccagtgccac caggaagggtg tcatttttca caactctaca gggacaggac aattcaaaac 240
 tccaacattt ggaacttccc cgaactctgc cctatgcacc tctacccttg gctcattcta 300
 atctgaatcc ctaaaactgca ataaactcta actatgggta tgagagcttt caatgagttc 360
 tgggtgagtct acttttaaag gaacaggatg gaaactccag ttagctcta gggacttgcc 420
 caaccctacc gcaaatacca agttcttaag agttctccgg cagttcccaa ggtgactcc 480
 actcgag 487

<210> 743
 <211> 260
 <212> DNA
 <213> Homo sapiens

<400> 743
 aattcggcct tcatggccta ataaatttga aactttcaac aacatatttt tcagccataa 60
 aactttcatt aagttttaag gaacagcttt ataaaaaagt tagttttcta cattctttca 120
 tctgatatag taaaatgcag ttcgatttta taatttcatt ttttttctt ttttttgctg 180
 acaccggca ctttattagt ggggaaactc gccttggtct ggcagagact gggatcaaca 240
 ggaccagcac ccattctgag 260

<210> 744
 <211> 523
 <212> DNA

<213> Homo sapiens

<400> 744

```

gaattcggcc ttcatggcct aaagaataat tatatgagtt aatTTTTTtTc tttttttggg 60
ggcttgctac tgattagcca aaggcagggg ggagactggc gggtttgaaa ttagagacac 120
ctgtgctgtt ttgggaagtt gaggtccttg acctaggatt tgctgaagtt ggtgcaggag 180
aggtcagtgT aggttaatat tttcagagct caaagcaagt gtggattggg gttgtttata 240
ggtgcagttt tgcttgatct ctgtatctgc aaatggagta aaaaagtaca gtactgctgt 300
tttgggaaac ttctgcaaaa gtccctgagc caatgcaaat taattttctt caaaaatacc 360
aagaaaaattc cccatttggc tgtttcacct ggttgaggga attgactctt gtcattatgc 420
ttgtaaagaa attaccaggg tgggtgtggt agttcatgcc tgtaattcca gcactttggg 480
cggctgaggt ggatgaattg cttgaatcca ggaatttctc gag 523

```

<210> 745

<211> 275

<212> DNA

<213> Homo sapiens

<400> 745

```

gaattcggcc ttcatggcct agtaggatta tgttccttct ggaagctgta gtggggatct 60
tttctctgca ttttctaact cctagaggct gtctgtatc cttggctcat ggctcccttc 120
taaagaagta aaaaggcctg tatttcagat ggaatacttg atctgtgtaa tccatcaagt 180
agataaaacc acttttttgg tttattgaaa caagaccatg aaagtaaagt tttgaaaaag 240
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<210> 746

<211> 688

<212> DNA

<213> Homo sapiens

<400> 746

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ccactggcag cactacagcg agaacatggt ctcccttgag gtggagaagg agctgtttgc 180
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aacaaattat gtgatcagaa gagcatttaa acgcaacatc tttgtattat atcttctgca 360
cctgattaga tccccacttt tttttttttt tttttaaaga ggtcttccaa ctggagtgca 420
ggtatgcgat tatagctcac tgcagctggg actgcaggta tatgccaccà tgcccagcta 480
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aactcctggc ctcaagcggg ccttcaacct tggcttccca aagcgtggg attacaggca 600
tgagccactg tgcccagcca gatctccaga tctgtgggca ttcagtaatg gtactgggat 660
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<210> 747

<211> 621

<212> DNA

<213> Mus musculus

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 <222> (612)

<400> 747
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 tgctgtactt gttttcttcg atgtntctaa aataccctcg gccatgatct tctcgcggtc 180
 ttttaacgcc tctcttttta tctccacctt tctgttctgt tttgccgtct cctcccgct 240
 gctgttggtc ctgcntcgcc cctggcggtg ccaccgtcac cgcgaagagc gangtggggc 300
 cgctgntctt gcccgcggtc tcttgccgg caccacgtg ctgggaangc tgctgctgcg 360
 ccgctgctgc cggcggttgg gactgctgct ccccgtagcc gttctngtcg ccccgccct 420
 cctcctcgt cgccgancct gtcttcccc ctccttgaa gccctggctn ntgcngttc 480
 tcgttntnnc gannctgctt ctnttctt ccatcgncnc nggnntnanc cgcctccncc 540
 gccngttct cctcnccan ctncctntn gtngccttc cananngng atnacctta 600
 ggcntctntg gngcgaaatt c 621

<210> 748
 <211> 295
 <212> DNA
 <213> Mus musculus

<400> 748
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 tgaccttcta aagcggacac accaagaaga aaagaagaaa gtggaagaca agaagaagga 180
 gcttgaggag gaggtgaaca acttccagaa gaagaaagca gcggctcagt tactacagtc 240
 ccaggcccag caatctgggg ccagcaaac caagaaagac aaggatctcg tcgag 295

<210> 749
 <211> 395
 <212> DNA
 <213> Mus musculus

<400> 749
 gaattcggcc aaagaggcct acgatatttg ctgcgaccgg caggcgctat ccgctgccgg 60

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cgggcccgaac agcatgacgt ccgcttttga gaactacatc aaccgaactg ttgccgttat 180
taccatcagat gggagaatga ttgtgggaac actgaaaggt tttgaccaga ccattaattt 240
gatttttggat gaaagccatg aacgagtatt cagctcttca cagggggtag aacaagtggg 300
actaggatta tacattgtaa gaggtgacaa cgttgcagtc attggagaaa tcgatgaaga 360
aacagattct gcgcttgatt aggggaacac tcgag 395

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<210> 750

<211> 441

<212> DNA

<213> Mus musculus

<400> 750

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gctctctgca tcccctggac ccaaggcagt gatggagggg gtcaggactg ctgccttaag 180
tacagccaga agaaaattcc ctacagtatt gtccgaggct ataggaagca agaaccaagt 240
ttaggctgtc ccatcccggc aatcctgttc tcaccccgga agcactctaa gcctgagcta 300
tgtgcaaacc ctgagggaagg ctgggtgcag aacctgatgc gccgcctgga ccagcctcca 360
gccccagggg aacaaagccc cggtctgcagg aagaaccggg gaacctctaa gtctggaaag 420
aaaggaaaag gcaaggtcga g 441

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<210> 751

<211> 243

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (46)

<400> 751

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gaattcggcc aaagaggcct aaaagaaaat ttaaagcatc cagagnatag catattatca 60
gagatgaaga tgctaaaaga gaagagacag caatcagaaa agaccttcat gccaaagcaa 120
cgtagcttac aaagcttgga ggcaagtctg catgctatgg agtccaccag agagtcactg 180
aaagcggagc taggaacgga tttgctttct caactcagtc tggaagatca gaaaagactc 240
gag 243

```

<210> 752

<211> 507

<212> DNA

<213> Mus musculus

<400> 752

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gaattcggcc aaagaggcct agtggatctg acgacaccaa aagggtcag gatgctactg 60
ttgcaagctc tcctgttcct cttaatcctg ccagtcagtc ccgaagatga cgttactaca 120
actgaagagc tagctcctgc tttggtccct ccacccaagg gaacttgtgc aggttgatg 180
gcaggcatcc caggacatcc tggccacaat ggcacaccag gccgtgatgg cagagatggc 240
actcctggag agaagggaga gaaaggagat gcaggtcttc ttggtcctaa ggggtgagaca 300
ggagatggtg gaatgacagg agctgaaggg ccacggggct tccccggaac ccctggcagg 360
aaaggagagc ctggagaagc cgcttatgtg tategctcag cgttcagtgt ggggctggag 420
accgcgtca ctgttcccaa tgtacccatt cgctttacta agatcttcta caaccaacag 480
aatcattatg acagcagcac tgtcgag 507

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<210> 753

<211> 408

<212> DNA

<213> Mus musculus

<220>

<221> unsure
<222> (97)

<220>
<221> unsure
<222> (118)

<400> 753
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caaacatgtc gctctccacg aagctgccag gatccancag aagactgacg cgctcccngg 120
ctgttagctt ccctcgcttg tgctgcgcgt cgatgcggcg ctggcctcct ccagcaacg 180
ctgcatggcg ctgtgtgtcg atgcgctctt taactgaaac cggctggctg caaaggccgc 240
gggtcgtgat gccgaggccg caattcagaa cggtagacct cgctccagcc gccaccgccc 300
gaatcctaata cgccgcccgc attttttttt tttttttttt gactgccagc gagacacaca 360
ctccccctcg ggaacttat ttttatcagc agccattacc ttgtcgag 408

<210> 754
<211> 431
<212> DNA
<213> Mus musculus

<400> 754
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tgatgccttt gtcagcaggg ctgcctagcc tccccaacct cccagcctc tccaacttca 120
acctccctgc tccgcacatc atgccagggg tcgggtttgc agagctcggg agcccggtt 180
tgccacctct tccctccttg cctccccgaa acttacctgg cattgcacct ctccccatgc 240
tgtccgactt cctccccgta tcccttttg ttccagaggg ctcttctgca gccagcgag 300
gggagccgct gtcttccctt cctgccatgg gccaccttc tgacctgtc atgactactg 360
caaaggcaga cgcctcttcc ctcaactgtg atgtgacgtc tctgtcttcc aaggtcccca 420
ccctagtcga g 431

<210> 755
<211> 441
<212> DNA
<213> Mus musculus

<400> 755
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ctcaactcaa ccacaatcat ggctcagatg atgactctga gcctccttag cctggctctg 120
gctctgtgca tcccctggac ccaaggcagt gatggagggg gtcaggactg ctgccttaag 180
tacagccaga agaaaattcc ctacagtatt gtccgaggct ataggaagca agaaccaagt 240
ttaggctgtc ccatcccgcc aatcctgttc tcaccccgga agcactctaa gcctgagcta 300
tgtgcaaacc ctgaggaagg ctgggtgcag aacctgatgc gccgcctgga ccagcctcca 360
gccccaggga aacaaagccc cggctgcagg aagaaccggg gaacctctaa gtctggaaag 420
aaaggaaagg gcaaggctga g 441

<210> 756
<211> 658
<212> DNA
<213> Mus musculus

<400> 756
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actcaactcc ggcgagagcc gatcgtgctc tggattcggc cgcgggatgt gggcgcaagc 180
ttggcacgcc gggtgtctgc ttcccgggtc cggggctcag cgaccgccc tttcgtgtca 240
tttctcagg aggcaccatg ttctcaccg ctgtcctcct ccgcggccgc attccgggca 300
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tgatccgtcg cctggagggt gaggcggaga accactactg gtcagcatg ccctacatga 420
cagcagagca ggagtgcggc cagcccgcg agcgacgggc ccaggctttt gaagccatca 480

aggcagcggc cacttccaag ttccttaagc atagatacat tgcagaccag ctagaccatc 540
 tcaacatctc gaagaaatgg tcctaaccct tcaagattat ggataccgga ctgctctatc 600
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<210> 757

<211> 265

<212> DNA

<213> Mus musculus

<400> 757

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 cactgtaggt atggacaggg aagaaaggaa gaccatcaat cagggtcaag aagatgaaat 120
 ggagatttat gggtacaatt tgagtcgctg gaagcttgcc atagtttctt taggagtgat 180
 ttgctctggg ggggttctcc tctcctcctc ctattggatg cctgagtgcc ggggtgaaagc 240
 gacctgtgtc agagcagaag tcgag 265

<210> 758

<211> 354

<212> DNA

<213> Mus musculus

<400> 758

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 tggattttga tgctgctctc aacaatacca ggccccgggt tcacagcagg tgcccaggga 120
 agctgttccc tgcgctgcgg ggcacaggat ggactctgtt cctgtcacc aacctgctcg 180
 ggccttggca cctgttgtga agattttctg gactactgcc tagagatttt accctcctca 240
 ggggtccatga tgggtggcaa agacttcgtg gtgcaacatt taaagtggac tgaccctact 300
 gatggggtca tttgcagggt taaggagagt atccaaaccc ttggctatgt cgag 354

<210> 759

<211> 350

<212> DNA

<213> Mus musculus

<400> 759

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 gctctaaggt gggagttata aaggaggtga atgtgagccc atgtcccacc gatccctgtc 180
 agctgcacaa aggccagtcc tacagtgtca acatcacctt taccagcggc actcagtcctc 240
 agaacagcac ggccttggtc cacggcatcc tggaagggat ccgggtcccc ttccctattc 300
 ctgagcctga cggttgtaag agtggaatca actgcccccc agaagtcgag 350

<210> 760

<211> 392

<212> DNA

<213> Mus musculus

<400> 760

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 agtgggacag atcattcagg actacgacag tgataagatg ttccctgctc tgggatttgg 180
 ggcccagtta ccaccagact ggaagggtgc ccatgagtcc gctatcaact tcaacccccc 240
 taaccctttc tgctcaggcg tggatggcat cgcccaggcg tactcagcct gtctgcccc 300
 catctgcttc tatggcccca caaacttctc ccgcatcgtc aacctgtgg ccggttttgc 360
 agcccaggcc acccagcagc agaacagtcg ag 392

<210> 761

<211> 332

<212> DNA

<213> Mus musculus

<220>
<221> unsure
<222> (5)..(8)

<400> 761
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aggcactagc cagctgggaa caagaaggac attccactcc actgcaggac cagtgccag 120
actgggcagg gaaagcagag gcccgaggatg cattggggga ggcaactgac gacccagct 180
tctgcagccg ccacaggagg gggaaagagt gcttgccttt gcacccaaac aaggcccatg 240
gctgcaaaaca gcccttcca tcaaatccaa gagtgtcatc tgaactgtca caaataacag 300
ttgatcatga agagcagagt gaccatcaca ga 332

<210> 762
<211> 372
<212> DNA
<213> Mus musculus

<400> 762
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ctccaacagt gtcttccctc cctttctccc ttctctctcc tctgtgccc ctccctgaaa 120
gggctcaacc ttgctgacct gtcctgttct aactgtcccc agtcacatat cccatgtgca 180
acactgacca cacagtgtct gtcaccacgg ccagcactgc agctcgcccc agcacaagcc 240
cccctggctg gcttggacct gagtgtttgc tcccttctg ccactcctgg aatctgcaat 300
gtggcgccat cttgcttgta tgcagggcac ccgtttttgt gcatttcgct ttgttttccc 360
ggagtggctg ag 372

<210> 763
<211> 387
<212> DNA
<213> Mus musculus

<400> 763
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gcgaagatga aggctctgtg ggcctgtgtg ttggtcacat tgctgacagg atgcctagcc 120
gaggggagagc cggagggtgac agatcagctc gagtggcaaa gcaaccaacc ctgggagcag 180
gccctgaacc gcttctggga ttacctgcgc tgggtgcaga cgctgtctga ccagggtccag 240
gaagagctgc agagctccca agtcacacaa gaactgacgg cactgatgga ggacactatg 300
acggaagtaa aggcttaca aaaggagctg gaggaacagc tgggtccagt ggcggaggag 360
acacggggcca ggctggggcaa agtcagag 387

<210> 764
<211> 467
<212> DNA
<213> Mus musculus

<400> 764
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taatgaaaaa cctcactcag agcgaacagt tgaaagcctg tcatggagcc ggatcctccc 120
ccgtgacctt gagctcagga gagggccaag aagtagatat cctgcagatg ctcaccaagg 180
ccaaggatga gtacaccaag tgtaagacct gttccgagcc aaaacagatg accaattcct 240
ctgccatctg tgacaacct aaacttatca aacctgtccc cgtgagacct agcagcagcc 300
agaggctgca aggacctgcg ccagcaaga cctcggacct tgagcctcag cacttatctt 360
taacagcact atttgggaaa caagacaaag ctccctgtca ggaaactgta aagccctccc 420
ggacctttgc ccaccaccac caccatcacc accagcagct tgtcgag 467

<210> 765
<211> 487
<212> DNA
<213> Mus musculus

<400> 765

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attacagaga aacttttcagc tcatgaggga cctagaccaa aggacagagg acctgaaggg 120
tgaatttgac aagttggcca ctgaatatat gtagtagcgc cgcagcctga gctccgagga 180
gaagctggcc cttctcagac agatccagga ggcctatggc aagtgcgaagg aatttggtga 240
cgacaagggt cagctggcca tgcagaccta tgagatggta gacaaacaca ttcggcgggt 300
ggacacagac ctggcccgtt ttgaggctga tctgaaggag aaacagatcg agtccagtga 360
ctatgacagc tcttctagca aaggcaaaaa gagccggacc caaaaggaga aaaaagctgc 420
cagagcccggt tccaaaggga aaaactcaga tgaagaagcc cccaagggtg cccagaagag 480
agtcgag                                         487

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<210> 766

<211> 382

<212> DNA

<213> Mus musculus

<400> 766

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ggtgacagat cagctcaggt ggcaaaagcaa ccaaccctgg gagcaggccc tgaaccgctt 180
ctgggattac ctgctgtggg tgcagacgct gtctgaccag gtccaggaag agctgcagag 240
ctcccaagtc acacaagaac tgacggcact gatggaggac actatgacgg aagtaaaggc 300
ttacaaaaag gagctggagg aacagctggg tccagtggcg gaggagacac gggccagggt 360
gggcaaaagag gtgcaagtcg ag                                         382

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<210> 767

<211> 508

<212> DNA

<213> Mus musculus

<400> 767

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gaattcggcc aaagagccta cttgcgggtg tccatctcac ctacagctct ggtctcatct 60
caactcaacc acaatcatgg ctcagatgat gactctgagc ctccttagcc tggctcctggc 120
ctctctgcatc ccctggaccc aaggcagtga tggagggggg caggactgct gccttaagta 180
cagccagaag aaaattccct acagtattgt ccgaggctat aggaagcaag aaccaagttt 240
aggctgtccc atcccggcaa tctgtttctc accccggaag cactctaagc ctgagctatg 300
tgcaaaacct gaggaaggct ggggtgcagaa cctgatgcgc cgctggacc agcctccagc 360
cccagggaaa caaagccccg gctgcaggaa gaaccgggga actctaacta agtctggaaa 420
gaaaggaaag ggcaaggctg aggtttctccc tatagtgagt cgtattaatt tcagaggagt 480
atttagaaga gaagctgaag ctgtcgag                                         508

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<210> 768

<211> 297

<212> DNA

<213> Mus musculus

<400> 768

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gaattcggcc aaagaggcct aggacttggt tcggaaggag ctgactggcc aatcacaatt 60
gcgaagatga aggctctgtg ggccgtgctg ttggtcacat tgctgacagg atgcctagcc 120
gagggagagc cggaggtgac agatcagctc gagtggcaaa gcaaccaacc ctgggagcag 180
gccctgaacc gcttctggga ttacctgcgc tgggtgcaga cgctgtctga ccagggtccag 240
gaagagctgc agagctccca agtcacacaa gaactgacgg cactgaagga ggtcgag 297

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<210> 769

<211> 310

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (65)

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<221> unsure

<222> (82)

<220>

<221> unsure

<222> (104)

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<221> unsure

<222> (181)

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<222> (210)

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<221> unsure

<222> (298)

<220>

<221> unsure

<222> (304)

<220>

<221> unsure

<222> (306)

<400> 769

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ggtenctgcc agccaggcgg anccccctgca cttcaaggac tgcngctcta aggtgggagt 120
tataaaggag gtgaatgtga gcccatgtcc caccnatccc tgtcagctgc acaaaggcca 180
ntcctacagt gtcaacatca cctttaccan cggcactcag tcccaaaaaa gcacggcctt 240
ggtcaccggg catcctggaa aggatncggg tccccttccc tattcctgaa acctgacngt 300
tgtnanaatg                                     310
```

<210> 770

<211> 512

<212> DNA

<213> Homo sapiens

<400> 770

```
gaattcggcc ttcattggcct aaaaatattt tgggtggcacc tcaaaactcc caatttagat 60
ttaatttaga ttaaaacact tactcttttt aataaagtta taaaattaat tattaataatt 120
gcctattgaa gattaaaggc agtggaaagt ttattttcct taaaaaaca ttttgtcttc 180
aataagtgtg attgtgttaa tcaattatgc tattaataat acaactgcgc ctggcctatg 240
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gcattctgtct tctaaggagc ctccctgctt cagcctttac agagtatctt tctagcctcg 300
 tctctggctc tgttcacggc cctctacaga gcattgcctct gcctttgttc tttgaggagc 360
 gtgtagcctc cttctccccc acctcaaaca tctgcgcagt tcccatttac ctctcagcct 420
 gggccagtgc acagcatcaa caagctttct ctgagaaggc agaaccagct atttcttggc 480
 ctgtgttctc atcatactct acacaactcg ag 512

<210> 771

<211> 624

<212> DNA

<213> Homo sapiens

<400> 771

gaattcggcc ttcattggcct aattatagct cactgtagct tcaaaagcct gggctcaagc 60
 agtcctcctg tctcagcctc ccgagtagat aagactacag gcacagggtg gtgttgacct 120
 cctagcctca agcagcctcc caaagtgcgt agattacagg tgtgagccac tatacccagc 180
 ccagtgttat atttttgtat aatcctatga agtatcaagg cagttattat cctgttttta 240
 ctgctaagaa acttgaagtt tacagaggta aattatttgc ctaagcctaa actctgatct 300
 cgaatctgaa tcccaagtc aatattcttt tcaccgtatt acaatatttt taccatcaac 360
 cctccattct gtctgcacat catacaaatg agtatctcta cagagctttg agttgctttt 420
 aaacaaaaga gatttttgta cccaatgttt agagttagtga ttctcggctc catttttaca 480
 agatttcaag atttaatttg tcaaaaaagt tctgaaattt tcaaagcaaa agcaatttta 540
 atttaattgc tctaaaaaat aagcagattt atcatttagc aattctttaa gggagagtgt 600
 atcataaaac tgaaatagct cgag 624

<210> 772

<211> 418

<212> DNA

<213> Homo sapiens

<400> 772

gaattcggcc ttcattggcct aatgaattta tttatatgaa ggctctcaca gagacacaca 60
 cagcacttca gtatgatttg cattcctggg taaagaatca ccaatattta aaataaaaac 120
 tttcctgaaa ttgggactgt catgttatcc agaagggtg gtacatccgc ccaccatgtc 180
 ccctgctgg gtcaggagcc aacacaggac cctgcgtgtg agcgtgcctg acatctcacg 240
 cacggccact ccagagccgg tccctgtcct tggaaagctg tgaagccttg cgttgagtgc 300
 cttctcgata ctgacggctc cgtgctgaca ttctgagctc tggagtcaca ccagcgcagg 360
 ggcgtggagg aactgagggt tggaaaggaat gccaggctc gcacagcttg gcctcgag 418

<210> 773

<211> 197

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (40)

<400> 773

gaattcgcgg ccgcgtcgac catacaagca ccttggcagn tatgaagttg atgacagctt 60
 tggatgaatgt ggcactaaat cttagcatta atatggataa tacacaaaga caatatgaag 120
 cagaacggaa taaaatgatt ggaaaacgag ccaatgagag gctagaactc ctgctacaaa 180
 agcggaaaaa gctcgag 197

<210> 774

<211> 626

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (46)

<220>

<221> unsure

<222> (66)

<220>

<221> unsure

<222> (68)

<220>

<221> unsure

<222> (93)

<400> 774

```

gaattcgcgg cgcgcgtcgac tgggaattcta gaccagcctc gagaanctag tateccaccc 60
ttggtnengc ctgtcgccaa tgtgcctgct gtncagcaga cactaattca tagtcagcct 120
caaccagctt tgcttcccaa ccagcccat actcattgtc ctgaagtaga ttctgataca 180
caacccaaag ctccctggaat tgatgacata aagactctag aagaaaagct gcggtctctg 240
ttcagtgaac acagctcatc tggagctcag catgcctctg tctcactgga gacctcacta 300
gtcatagaga gcactgtcac accaggcatc ccaactactg ctggtgcacc aagcaaactc 360
ctgacttcta ccacaagtac ttgcttacca ccaaccaatt taccactagg aacagtgtgt 420
ttgccagtta caccagtggg cacacctggg caagtttcta cccagtcag cactactaca 480
tcaggagtga aacctggaac tgctccctcc aagccacctc taactaaggc tccggtgctg 540
ccagtgggta ctgaacttcc agcaggtact ctaccagcg agcagctgcc accttttcca 600
ggaccttctc taacccaagt ctcgag 626

```

<210> 775

<211> 233

<212> DNA

<213> Homo sapiens

<400> 775

```

gaattcgcgg cgcgcgtcgac aaaataaaaa taaaaataat aataaaaacc agtcctaaac 60
caaattctta cttagtctc tagcctcaga gtttattagt tcttagtaat gttactatga 120
aggcaaatag gagacaaatt attattctgg tttttattgt tactgccact gcaattccta 180
tgattattgc tataattccc tatttaatag gtaacaagt tacaacactc gag 233

```

<210> 776

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (71)

<220>

<221> unsure

<222> (97)

<400> 776

```

gaattcgcgg cgcgcgtcgac tgctagttgt acttgtagtt ttttgaggac cctccatact 60
gttttccata ntggctatac tactttactg atctttntct tttctctaa tttaaacaac 120
tgtcacaaag tcagtttgac ttattgaact tgtataactt ctgtgcctca ataaaactga 180
atgttacagt aaggaaattag gtgaaattta cttttttttt ttttttttc aggaagactt 240
acttagttag gtagctagta gaatagtaac ctgaactcaa gaaatgtaat ttcacctga 300
taaaactgct gagtagggct atcttcctaa ttttcattaa atatttctta cttggaaaca 360
ttgaatatta aatgagacaa aaactgtaag actaacagca aactcgag 408

```

<210> 777

<211> 156

<212> DNA

<213> Homo sapiens

<400> 777

```

gaattcggcc aaagaggcct accacactga aattatttgc caatgaatcc caaagatttg 60
gtacaaatag tacaattcgt atttgcttcc ctcttttcctt tcttcagaca aacaccaa 120
aaaatgcagg tgaaagagat gaaccactcc ctcgag 156

```

<210> 778

<211> 535

<212> DNA

<213> Homo sapiens

<400> 778

```

gaattcggcc aaagaggcct aagaaaaacg ccaacttttc agacaaattt tccctccacc 60
agaatcactc cggtagagac acagagaaca gacttcttgt actccacga tgaatgagcc 120
ggagggtcact tactcaactg tgagacttca taagtcttca ggggtgcaga aattagtaag 180
gcatgaggag actcaagggc ccagagaagc tggcaacaga aagtgttcag tatcctggca 240
actcattgtg aaagctcttg gaatcctctg tttccttctt ctggtaatag ttgcagtgtt 300
gacgataaag atttttcagt atagtcaaca caaacaagaa atcaatgaaa ctctcaacca 360
ctaccataac tgcagcaaca tgcaaatga tttcaactta aaggaagaaa tgttgacaaa 420
taagtctata gattgtaggc caagcaatga acttctggat tacatcaaaa gagaacagga 480
cagatggaac agtgaacca agacggtttt agattcctca cgggacaatc tcgag 535

```

<210> 779

<211> 123

<212> DNA

<213> Homo sapiens

<400> 779

```

gaattcgcgg ccgcgtcgac gcaggcattc tctcattccc attttacaga gaggaaactg 60
agactcaaag gactgactct aaagcccaag ctctcgacca tgagaccata cttctttctc 120
gag 123

```

<210> 780

<211> 436

<212> DNA

<213> Homo sapiens

<400> 780

```

gaattcgcgg ccgcgtcgac cgggtagttg gagaaaaaaa ttgcaaagaa gatagttcca 60
caaaagtggag aagaagaact caagtgggga aaaaaaagta gacttttcaa ggaaagagga 120
aaggaagaaa aggaattgca tgtaaataat agagatgagg atgaatcaga gtgacttcct 180
aaatatatgc tgcataaggaa gaaaaatgtg gccaaagagga atggtgggac ctgaaagaga 240
tgtggaggag ggtgagagga agggactgtg tggaaaggcag agctccgaaa cacagccgga 300
aaacagctgc ttgtattcca gctacagcat ggaaatgcac gcgggcctct ccgctgctcc 360
tcaccagccc gcaccctaca cagaggcttc tgttcattca ttagttcatt cactcatgga 420
tcctcttccc ctcgag 436

```

<210> 781

<211> 651

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (49)

<400> 781
 gaatttcagt agtttcactt ttcaaaatta aacaaatttt taattttant taattctgtt 60
 gttattttctt cagagtgttt ctctctgtca cttaggctag agtgcagtgg catgatcttg 120
 gctcactgca acctccacct ccacaggttca agcgattctc ctgcctcagc ctcccttgta 180
 gctgggatta caggtgcctg ccaccacgcc tggctaattt ttgtattttt agtagagatg 240
 gggtttcacc atgttggcca ggctgggtct gaactcctgg ccttgtgac caccgcctc 300
 ccaaagtgtt gggagtacag gcgtgagtca ccatgcccgg ccttcttctt ttattttttt 360
 ttaaagtaga ggttgcaaac tgacagcctt tggaaagaat acagcctaca aatacttttg 420
 tttggcttgc acagtatttg tttattgttt ttacacacga agaagttgag agcattttaa 480
 acactggcag tttaaataaa gttttaaatt tttggcttct tttggaaaat ggaaagggtg 540
 ctctctctct ggtcagcatt cctcttgggt gcagtttagt gcagctgggt tgaagctgct 600
 cctttagcca ggcttgtggg ctccagtttg ccacagcctc caccactcga g 651

<210> 782
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 782
 gaattcgcgg ccgcgtcgac aaaataattc agatgagcta gtttctagtt tgccctataa 60
 tttttagaag ttacatgcta actcaccctg tattatgggt agaaatctga actgtgggag 120
 ataactgggtt ttgacccac gtaattttcc acttaacctt tattcacaga gtactgaacc 180
 taggcttttc tcatacagaa tctctcaagg gtttaaatg acagtgtata gtttttgtaa 240
 aggcagggtta aatcttgatt ttaatgtagg cttttgacat gtattatttt cttcattggt 300
 ttttaactctt gaactttatg agttaggatt ccttgacaaa tatacgctaa taaatgtctt 360
 agtaccgata tgaacaatct cgag 384

<210> 783
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 783
 gaattcgcgg ccgcgtcgac tggcaaaggg ggtggtagat tctggcaaaa aagttttggc 60
 atctgacacc catcagatct gctggctgac cgaattatac attctgtgga tagagagttc 120
 tcaaagtaac attgatccat gatattttgt tgcgtgatgc tcgag 165

<210> 784
 <211> 457
 <212> DNA
 <213> Homo sapiens

<400> 784
 gaattcgcgg ccgcgtcgac cctaaccgt cgattgaatt ctagacctgc ctgagctat 60
 ccacctgcct gtctacacct tcctccttcc atccatccac tcacctgtct acaccttctt 120
 ccttccatcc gcctgtctac actttctctc ttccatccac ccacctatct ataccttctt 180
 ccttctgtcc acctgcccac ctacgccttc ctccatccat ccacctgcct gtctacgcct 240
 ttctccttcc atccaccac ccatctatac ttctcctctt ccatccacct gcctgtctac 300
 atcttctctc ttccatccac ctgcctgtct acaccttctt ccttccgtcc atccacacat 360
 gcactgttcc ttccaatcat ccttctgggt gttgttatca ccttggccat ctacggcacc 420
 cggaagttca agaagaaaagc ataacaggca actcgag 457

<210> 785
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 785
 gaattcggcc aaagaggcct acgagggcga cggaggaaact ttcgcgagca aaagatccgt 60
 ggccgagatc caggagagag cagcggtaga atgaggccgg cgtgattctg aactgtaaac 120

```

ccagaagagg cgtggctgtg gcgaggagg gagtcgtgag gggtagtact aacctcggga 180
gggcgcgattc gggatcctaa tcggatattt cattttggtt tatctcttag ttttgtcaaa 240
aaattttatc tgagtttata ttaaattaac tcattatcag aagattatta aataaagata 300
tagaaaaata catcagaaat ttcttgacgg gagttaaaaa ttagcatcct ccatttctct 360
ttacagagtt actgcattta aaattatttg tttgttcagt tatttacctg ctcatgttgt 420
tcgctgttgt actcgag 437

```

<210> 786
 <211> 398
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (16)

<220>
 <221> unsure
 <222> (82)

```

<400> 786
gaattcggcc aaagangcct ataggcctct ttggccgaat tcggccaaag aggcctacta 60
tttgtgtatc tttttgcttg tnttctgttg ggatagtcct ggactttttc aaatttcatg 120
aatcagggag gggacaacag gtagaatagg cctcctgagt cccttacctg ttctttttcc 180
ttttttctag tctgggtttt cttctcctta tcattttctt gttctttttc attttcctat 240
gctgctgctt ctatttcttc tatgtgttgt tgtttctcct tctcctccct ttgtattatt 300
tatcccaagc aatagcctta acaacaacc atccaaaact gagttaaaaa tagactactt 360
gtcagtgtgt tgtactcccc cctcctcctt gccgcctg 398

```

<210> 787
 <211> 200
 <212> DNA
 <213> Homo sapiens

```

<400> 787
gaattcggcc aaagaggcct agagactgga ggccagtgga gcattttgag cagagccgtg 60
tcatggaaa agtcatcttt tcagtggtta ctttgacttc tgtgtggaga acagactgga 120
gtggagctgg agtagagaga ggagactggt taggagcatt gccacagtcc aggcattgaga 180
cgatgggtgc tggcctcgag 200

```

<210> 788
 <211> 199
 <212> DNA
 <213> Homo sapiens

```

<400> 788
gaattcgacc aaagaggcct agtcgattga attctagacc tgcctcgagc aaccgcgtat 60
tagtactttg gctaataaat tggatcccat tttgtttgct aaataaagg ttagtggtgga 120
cttactttcc tctttacttt gaaaatctga atatagttcc caaatgaatt taaagtacat 180
tcaagcaacc atactcgag 199

```

<210> 789
 <211> 258
 <212> DNA
 <213> Homo sapiens

```

<400> 789
gaattcggcc aaagaggcct acggtatgtt aaaactatgt taaattctgc ttgtctattt 60
tgttgtgtga taaaaagact tctaaattgg aagtcaggaa ggatggacct cagccatgag 120
ctgccttgcc aggtctgtct tatcacaaca gttggtattg cccttactgc aacaaatggg 180

```

gaagtagatt tgactgcaca ttttaacaaa aatcttgaga ataccaggaa aacaactagc 240
atgaagggaa gtctcgag 258

<210> 790
<211> 223
<212> DNA
<213> Homo sapiens

<400> 790
gaattcggcc aaagaggcct acgagtatct ggagttgagc tctgtattga catctaattct 60
gcattttctcc tctactgggg tgaacactgt ctcgtcactg ggtataacag cattactact 120
attgctgcta cagccaaagc tgtcatcaca ttgggaacta ctgttcagat caagtgtcat 180
gctatttttt gagggatctc cctgtttact tgtattactc gag 223

<210> 791
<211> 281
<212> DNA
<213> Homo sapiens

<400> 791
gaattcggcc aaagaggcct agatataagt tagctgcctt gaaaccctcc acaggatttt 60
caaaggactg ctagtgttcc atctgaagac ggaaagacac attccctgca acattttctg 120
cacagtgagc tgcccaaac aaagctgcct gttgcaaacc acctttcagt acagcatatt 180
ttttctcaaa cgctgcatat ttattaagca caccattttt cctgcgtatg gaattctgtt 240
ctctctcaat gttaattctt aatgtacaag ccatactcga g 281

<210> 792
<211> 134
<212> DNA
<213> Homo sapiens

<400> 792
gaattcggcc aaagaggcct agggaagaag aaaattctgt attggttttg actaacaaca 60
agctgccgga agatctcttt ttctccatgt tactgagagg tgacagtgtg ctggcagtc 120
tcacagccct cgag 134

<210> 793
<211> 165
<212> DNA
<213> Homo sapiens

<400> 793
gaattcggcc aaagaggcct acagaagatc ccacaggaga agatgcacat gactcccttc 60
tttgtagcat tttctagttc cccgcaccg tcagtggat tatctccctc gtgcagccct 120
ggcatatctg ccccatctct gagaggcatg cgcacgcccc tcgag 165

<210> 794
<211> 305
<212> DNA
<213> Homo sapiens

<400> 794
gaattcggcc aaagaggcct acgagcacag cccgcacccc ttgtacctgc accactccca 60
cccaaatgtg ccttctactt ataaatagaa caagaagtaa atatatatgc ttagctatct 120
taggagttag atcttgatg ttttaaagtc cagctgggtc agacaacatg ttacttgctc 180
cctatgtgat atggtttgga tatttgcct ctctaaattt catcttgaaa tctgaccccc 240
cagtgttga ggtgggatct agtgggaggt ggtgggtgat gggggcagct cccactacac 300
tcgag 305

<210> 795

<211> 182
 <212> DNA
 <213> Homo sapiens

<400> 795
 gaattcggcc aaagaggcct aagggtcatc ctaattatat ttgtacaagg aattgtgtaa 60
 gcatagaaac tatgaaaaac ataattttga ttacattatt tatatatttt tgtaatatga 120
 gtagttccaa gatcagagtt atggccacac attgctcgag caggtctaga attcaatcga 180
 cg 182

<210> 796
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 796
 gaattcggcc aaagaggcct aaaaatacaa cagatttctca gagactattt tttttggggg 60
 ggtttggggg cgggtgggga cggagttctg ctcttgtccc ccagcctgga gtgcaatggc 120
 acaatctagg ctactgttaa cctccgtctc ccagggtacaa gtgattcctc agagactatt 180
 attaggaaca cttcaagcac acaactagaa aatctagagg caatggacaa attcctgaaa 240
 acatacaacc tcgcatgttt gaatcaggaa gaaactgaaa ccctgaacag atgaataatg 300
 aattctgaaa ctgaatcagt aataaaaaaa caacaaccaa aaagctctgg accagacaga 360
 tccacagctg aattctacca gatgtgcaaa gagcctgtac caatcctact gatactattc 420
 cccaacaac ctcgag 436

<210> 797
 <211> 249
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (96)

<400> 797
 gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagaccat gcctggccct 60
 tttgtgtttt tttttaaatt attatttttt tttctngagg caggctctgc tctgtcacct 120
 aggctggaat gcagtggctc gatttcaggt tactgcatcc gaaaccttct gggctcaagc 180
 agtcttccca gtctcagctt cccaagtagc tgggactaca ggcgcatgcc accattccca 240
 actctcgag 249

<210> 798
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 798
 gaattcggcg ccgctcgac cctaaaccgt cgattgaatt ctagacctgc ctaggactac 60
 tgctcacgtg ccccgccac catattgaac tgccttgtag actatcacca aactcaaatt 120
 gaccaacca taataaatgt tatctattgt gctatttgcc atgctctgta ccagccctga 180
 gccagaccca ttccataaac tccattcatt cccatccaac tttcttcact ttactgagcc 240
 atgccttgta gcagcagcca cccatctcag ttctgccaca gccagctcca ctccctcacc 300
 cccgagtctc gag 313

<210> 799
 <211> 263
 <212> DNA
 <213> Homo sapiens

<400> 799


```

gaattcgcgg ccgcgtcgac ttcagttcta atagtttttt tgtgaagtct ttaggttttt 60
ccaaatataa gatcatatca tctgtaaaca aaaataatth gacttactcc tttctgcttt 120
ggatgtcctt tatttctttc tcctgtctga ttgctctagc taggactgcc agttctgtgt 180
tgaatagcag tggatgtagt gggcattctt gctgtattcc agatcttaga agaaagactt 240
tcagttttcc cccatgtctc gag                                     263

```

<210> 800

<211> 331

<212> DNA

<213> Homo sapiens

<400> 800

```

gaattcgcgg ccgcgtcgac ccaaacagcc cgggaccatg ctgtcgtctc gtccttgct 60
tccacacctg ggactgttcc tgtgcctggc tctgactta tccccctccc tctctgccag 120
tgataatggg tcctgcgtgg tccttgataa catctacacc tccgacatct tggaaatcag 180
cactatggct aacgtctctg gtggggatgt aacctataca gtgacggtcc ccgtgaacga 240
ttcagtcagt gccgtgatcc tgaaagcagt gaaggaggac gacagcccag tgggcacctg 300
gagtgaaca tatgagaagt gcaaactcga g                                     331

```

<210> 801

<211> 296

<212> DNA

<213> Homo sapiens

<400> 801

```

gaattcgcgg ccgcgtcgac ctgcccacta agaagatgaa gccttttcat actgccctct 60
ccttcctcat tcttacaact gctcttgaa tctgggcca gatcacacat gcaacagaga 120
caaaagaagt ccagagcagt ctgaaggcac agcaagggct tgaaattgaa atgtttcaca 180
tggtgtttca agactcttca gattgctgcc tgcctataa ctacaggatt cagtgttcaa 240
gatttatagg ttattttccc accagtgggt ggtgtaccag gccgggctg ctcgag      296

```

<210> 802

<211> 152

<212> DNA

<213> Homo sapiens

<400> 802

```

gaattcgcgg ccgcgtcgac gggaccatth gcttcttttc tttctgaat aaaatgtttg 60
taatactcat tgtaacagcg actgtggcat ggggcctgtc tttctgtagag cttttgtgct 120
gtgcttgttt ccacggcagc cagcaactcg ag                                     152

```

<210> 803

<211> 678

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (66)

<220>

<221> unsure

<222> (172)

<400> 803

```

gaattcgcgg ccgcgtcgac atccaggatg tgggtgtcct tgatccttct ttcttgccctg 60
ctggcnctga ccagtgccca tgacaagcct tccttccacc cgctgtcgga tgacctgatt 120
aactatatca acaaaccgaa tacaacatgg caggctggac gcaacttcta cnatgttgac 180
ataagctatc tgaagaagct gtgtggcact gtcctgggtg gacccaaact gccaggaagg 240
gttcggttcg gtgaggacat agatctacct gaaacctttg atgcacggga acaatggtcc 300

```

```

aactgcccga ccattggaca gattagagac cagggtcctt gcggtctctt ttgggcattt 360
ggggcagtgg aagccatttc tgaccgaacc tgcattcaca ccaatggccg agtcaacgtg 420
gaggtgtctg ctgaagacct gcttacttgc tgtggtatcc agtgtgggga cggctgtaat 480
ggtggctatc cctctggagc atggagcttc tggacaaaaa aaggcctggt ttcagggtgga 540
gtctacaatt ctcattgtagg ctgcttacca tacaccatcc ctccctgcga gcaccatgtc 600
aatggctccc gtcccccatg cactggagaa ggagatactc ccagggtgcaa caagagctgt 660
gaagctggct atctcgag                                     678

```

<210> 804

<211> 204

<212> DNA

<213> Homo sapiens

<400> 804

```

gaattcgcgg ccgcgtcgac gtcctttatg aattctatct tctcattctt ccgggcatgg 60
gctttctgta gcctcactat cctctcaatc agcatggctt tgtccacttc tgggaagtgt 120
tccacagcca ccgaggagct ggtattctct ggagatcggg cttcagcact gattcgagca 180
ttaagtgacc ctgatgaact cgag                                     204

```

<210> 805

<211> 284

<212> DNA

<213> Homo sapiens

<400> 805

```

gaattcgcgg ccgcgtcgac gcagactgtc ctgaactcat ctctcaaagc tgctacagag 60
cccaggaaga tttcaggatg aagagcttcc tcctcttctt cactatcatt cttctggttg 120
tgattcagat acaaacagga tccttgggac aagccactac ggccgcttct ggtactaaca 180
aaaacagcac ctccaccaa aaaacccctt taaagagtgg ggcctcatcc atcatcgatg 240
cgggtgcctg cagtttcttc ttctttgcca ataccgaact cgag                                     284

```

<210> 806

<211> 290

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (107)

<400> 806

```

gaattcgcgg ccgcgtcgac atcatggcta ccctgcgtgt ccactcctg gtggctctcg 60
tccttcttgc tgtggcaatt cagacctctg atgcaggctc ctatggngcc aatgtggaag 120
acagtatctg ctgccaggac tacatccgtc accctctgcc atcacgttta gtgaaggagt 180
tccttctggac ctcaaaatcc tgccgcaagc ctggcgctgt tttgataacc gtcaagaacc 240
gagatatctg tgccgatccc aggcaggctt ggtgaagaa gctactcgag                                     290

```

<210> 807

<211> 885

<212> DNA

<213> Homo sapiens

<400> 807

```

gaattcgcgg ccgcgtcgac tcatcatgga gctctcgcgg cggatctgtc tcgtgcgact 60
gtggctgctg ctctatcgtt tcttactggg cttcagcgcg ggatctgcca tcgactggcg 120
ggaacccgaa ggcaaggaa gctatgggatta tgtgactgtc cgaaaggatg ccacatggt 180
ctggtggttc tattatgcca ccaacccttg caagaacttt tcagagctgc ccttggtcat 240
gtggcttcag ggtggtccgg gtggttctag cactggattt ggaaactttg aagaaatcgg 300
ccctcttgac acccaactca agcctcgaaa tactacctgg ctgcagtggg ccagtctcct 360
gtttgtggat aatcccgtgg gcacgggctt cagctatgtc aacacaacag atgcctacgc 420

```

```

aaaggacctg gacacggtgg cttccgacat gatgggttctc ctgaaatcct tctttgattg 480
ccataaagaa ttccagacgg tccattctac attttctcag aatcctacgg aggaaagatg 540
gctgctggca tcagtgtaga actttacaag gctgttcagc aaggggaccat taagtgaac 600
ttttctgggg ttgcttttggg tgactcctgg atctcccccg tggattcagt gctgtcctgg 660
ggaccttacc tgtatagtat gtctctcctt gataatcaag gcttggccga ggtgtccgac 720
attgcagagc aagtccctga tgctgtaaac aagggttctt acaaggaggc cactcagctg 780
tgggggaaaag cagaaatgat cattgaaaag aacaccgacg gggtaaactt ctataacatc 840
ttaactaaaa gcagcccga gaaagctatg gaatcgagcc tcgag 885

```

<210> 808

<211> 275

<212> DNA

<213> Homo sapiens

<400> 808

```

gaattcgcgg ccgcgtcgac ctcaccatga tcgccatgct cacagtgtgt ctataccttg 60
gtcttattct ggaaccagg actgcagtac aggcaggaca cctcccaaag cccatcatct 120
gggctgagcc aggtctgtg atcgctgcgt atacatctgt gattacctgg tgcagggtt 180
cctgggaggg ccagtattat catctgtata aagagaaaag tgtaaactct tgggacactc 240
aagtcctctt ggaaaccagg aataaggccc tcgag 275

```

<210> 809

<211> 584

<212> DNA

<213> Homo sapiens

<400> 809

```

gaattcggcc aaagaggcct actcttttgc ataacacatg tctacaatga ttcttaagt 60
cctcctggcc tcccccttgc tgcccagcct tctcttccca agttttccat cttgttcttt 120
tcactcttcc tcacgagaaa tgccctccac tcccttccat atgtgacca gttctggata 180
cccacaagct tatecttttt ggggttcccc agtcactgcc ttagtgtgtg caccagtgc 240
tgtgttagag ggggcattca tgggatacctg tgggcactga cgataccgt agccactgcc 300
caagagttag cttcttcccc gccagagcct caggggcccc taaattccct gtcgaccatg 360
gtgttcatca ggaagtgggg ccaggaggga gccctctggt aatctgtcag ttattagaga 420
acctcctgaa tctggggagc tgggggttgt ggcttcttga agttgtaatt atttaacttt 480
gtattttgaa tagttttaga cttacagaaa agttgtaaga atagtataaa gaatttccta 540
catccttcac ccaaattttc caaatgttaa cattttggct cgag 584

```

<210> 810

<211> 600

<212> DNA

<213> Homo sapiens

<400> 810

```

gaattcgcgg ccgcgtcgac tgggagtgtg gctttgggaa acatgaatct cctattcaga 60
ctagcagttt tccttagcct gtgggtgtgt tccgatgtc agggacaaac aaaagaagaa 120
agcactgagg aagtgaaaat agaagttttg caccgtccag aaaactgtct caaaacaagc 180
aggaaaggag acttgctaaa tgcccattac gatggctact tggctaaaga cggctccaaa 240
ttctactgca gccggacaca agatgaaggc caccctcaat ggtttgttct tgggtgtcga 300
catgtcataa aggggctgga cattgctatg atggacatgt gccctgggga aaagagaaag 360
gtgattatac cgcttctggt tgcatatgga aaagaaggct acgcagaagg caagattcca 420
cccaatgcaa ctctgatgtt tgagattgaa ctttatgtct tgaccaaagg accaaggagc 480
attgaaacat ttaagcaaat agacacggat aatgaccggc aactctccaa agctgagata 540
gagctttact tacagaagga ctttgaaaaa gatgcaaacc cccgtgacaa gatactcgag 600

```

<210> 811

<211> 124

<212> DNA

<213> Homo sapiens

<400> 811
 gaattcgcgg ccgcgtcgac tgaagacttt gtgtggctgc atgacactct tactgaaaca 60
 acggattatg ctggccttat tatccctcct gctcctacaa agccagactt tgatggccct 120
 cgag 124

<210> 812
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 812
 gaattcggcc aaagaggcct accttcattg actctctttt cggactcagc ccgcctgcac 60
 ccagggtgaaa taaacagcca tgttgctcac acaaagcctg tttgggtgtc tcttcacacg 120
 gacgcgcattg aaacatataat ctatgtttatt tttctcacct atcattcacc tgaatttctt 180
 taataaatttt taaccctttg ttaaccacat ttagactgtt tctcttttta tttgtaagat 240
 ataaattttta taagagggtt gtttcaaggg gattctttgt ttatagagca tcaacaatgt 300
 tcaacacaca tctttcagtc accgtattgt ttagtgatat gttttttgct attccaaatg 360
 ggatttttatt cctattactt ttcacatga aattcacatc atatggattg gggctcccaa 420
 cccctgggc' acagacaggt actggctctga ggcctgttag gaactgggct acactcgag 479

<210> 813
 <211> 560
 <212> DNA
 <213> Homo sapiens

<400> 813
 gaattcggcc aaagaggcct agaggaatga tcatcgtcct gtcacatgc attgtctggt 60
 ttctctttct cttcatgtct ttgatcaaat ctgtggctgg ggatcatcac cagccctgg 120
 acgtctccgt cacaattacc ctgggagggt atcagcctat tttcacaatg agtgcccaac 180
 aaagccagtt gaaagtattg gaccagcaga gctttaacaa atttatacaa gctttttcta 240
 gggacaccgg tgctatgcaa tttctggaaa attatgaaaa agaagacata acagtagcag 300
 aactggaagg aaactcaaat tctttgtgga ccacagccc acccagtaag cagaaaaatga 360
 tacacgaact cctggacccc aatagtagct tctctgttgt tttttcatgg agtattcaga 420
 gaaacttaag tctgggtgca aaatcggaag tagcaacaga taagctttct tttctctta 480
 aaaatattac tcgaaagaat atcgctaaaa tgatagcagg caacagcaca gaaagttaa 540
 aaacaccagt gaccctcgag 560

<210> 814
 <211> 579
 <212> DNA
 <213> Homo sapiens

<400> 814
 gaattcggcc aaagaggcct agcttgatta taagatcggg tgcttaactt ctctgaaaca 60
 ggctcctctg cagaaggaca gattggctat gatgatctga ttagacgacg aggagaagca 120
 gcctggccta gaaggtgctc agtacgtggc agcgggtgat gtcacgtctc tcaggtgcga 180
 gagaggctgg ggtcagcgac ctggggcctt ctttgtatca ttttatgaag aaaggtaaaa 240
 ataccacagg cgagaacaag cagcaaaagg cggatgagat ttttcatctg cagctttgaa 300
 ttgatacctt taagtattga gctattcttt tgtaggaca gaacacgta ttcattaga 360
 agagaacatt ttgggggtgtt ggaagtgttc cacgtcctgt gtgggggtgac agttacacgc 420
 atgtcacatc agcagtctga ggagggaggg gagaaggggc gggctggata ccttcagcct 480
 cttcatcgca ctccaggcac caagtgaag ggcaggaggt tttcattatt tagggaatgc 540
 agccctggtg tagaggacac ctgcgagaga catctcgag 579

<210> 815
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 815

```

gaattcgcgg ccgcgtcgac ccgggggatca ccatggcgcc ctcattggtg gggaagaaga 60
tcgtgtttgt aacggggaac gccaaagaagc tggaggaggt cgttcagatt ctaggagata 120
agtttccatg cacttttggtg gcacagaaaa ttgacctgcc ggagtaccag ggggagccgg 180
atgagatttc catacagaaa tgtcaggagg cagttcgcca ggtacagggg cccgtgctgg 240
ttgaggacac ttgtctgtgc ttcaatgccc ttggagggct ccccgccccc tacataaagt 300
ggtttctgga gaagttaaag cctgaaggtc tccaccagct cctggccggg ttcgaggaca 360
agtcagccta tgcgctctgc acgtttgcac tcagcaccgg ggacccaagc cagcccgtgc 420
gcctgttcag gggccggacc tcgggcccga tcgtggcacc cagaggctgc caggactttg 480
gctgggaccc ctgctttcag cctgatggat atgagcagac gtacgcagag atgcctaagg 540
cggagaagaa cgctgtctcc catcgcttcc gggccctgct ggagctgcag gactactttg 600
gcagtttggc agctcgag                                     618

```

<210> 816

<211> 164

<212> DNA

<213> Homo sapiens

<400> 816

```

gaattcgcgg ccgcgtcgac ttcaaactct gtgttaaaaa ggagcctttt cctccttctg 60
gaagttgctc tgattaaatt tttaagcatt aaaatatgct gccccatttt ctaataatgc 120
agtatataat acaactccca ttactaacta atgctcaact cgag                                     164

```

<210> 817

<211> 719

<212> DNA

<213> Homo sapiens

<400> 817

```

gaattcggcc aaagagccta cgccaacttc cttctactct aataattaaa ataaaaataa 60
tacttgggag gtaactggaa taaaggttct aaaatcaaaa ccctctgaag ggtgaaaact 120
gggagcctcc tgttcccata gtaaccacag cactcagggc actgtctccc agcgtcggag 180
tactgtctta tgaccagaga tctaagcaa cctctgctca tctgagttgt ccaccatatt 240
gtgggcatga gtccttgaca atagttaaata gcacctctgt tcccttattg ggtaaatgat 300
tttccaactc tgggaatgtg tagaattcat tatggaaata atgcaataat tcaaatccat 360
aatattgata ctttcatggt aagtttagga ctaatcttgt gtatgctcct taagtgattt 420
gaatctttaa aaagcttatg attccaattt gaaatgtgaa attgatttta cgtttgtgat 480
ttgaagttga aaggtataag aatatttaac ttagctcatg aaaagtatta gactagattt 540
actataagtt taatgtatta gatttacaag agatgcttaa atatatgaga atgttttgtc 600
ttaattgggt ataactttgt catatcaatg atttgaagtg ctaaaataga aaattaaata 660
tgataaatta cacaagaagt ttagaatgtt taaaagattt taataaaca agcctcgag 719

```

<210> 818

<211> 100

<212> DNA

<213> Homo sapiens

<400> 818

```

gaattcggcc aaagaggcct aatttatatc ttggatgagg tggatgcggc cttggatctt 60
tctcatacc agaattattg gcagatgctg cggactcgag                                     100

```

<210> 819

<211> 615

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (58)

<220>

<221> unsure

<222> (74)

<220>

<221> unsure

<222> (118)

<400> 819

```

gaattcggcc aaagaggcct aatttttatg tctatccagt agttattttt gcaaactnat 60
acaatagtac aaanggcaca gtgttgaaag atcttaattt ttgagtgaag cttacttnaa 120
agaagtcatt tccccccctg aatcttagtg taaaggcagc tgcagtctgc tgacagcttg 180
tggttatgct ctgatttact ggggaaggag gaggttgtag tattttaaat gcataataga 240
gcattcgttt cgtcatctgg aagcagagat ggaagaagct ggggggaaat gagagacatc 300
actgttgctt tcgtggaggg aagcctttgta gcatgtttatc agacagcagt gcataattgaa 360
gaaaatatct gttagggaatg catgtcacca gatgtatttt gctttcaaga atggttagaca 420
catcaaaaca gaatcagata aaagcctgag aaaaagatgt tcagaagaat actggagtta 480
ttctttatgc ttcaactgcc ttacctctc ttggtacctt ccagagaaac aagtatagat 540
gtatttttag cttgccgttt ccagcatcaa tatgacaaca tgattttgtc tttatatcag 600
taagcagcac tcgag                                     615

```

<210> 820

<211> 680

<212> DNA

<213> Homo sapiens

<400> 820

```

gaattcggcc aaagaggcct agcagacaga gatacatgat actcactgtt accattcttg 60
ctctctgtct tccaagccct gggaatgcac aggcacagtg cacgaatggc tttgacctgg 120
atcgccagtc aggacagtgt ttagatattg atgaatgccg aaccatcccc gaggcctgcc 180
gaggagacat gatgtgtgtt aaccaaaatg gcgggtatct atgcattccc cggacaaacc 240
ctgtgtatcg agggccctac tcgaacccct actcgacccc ctactcaggt cgtacccag 300
cagctgcccc accactctca gctccaaact atcccacgat ctccaggcct cttatatgcc 360
gcttttgata ccagatggat gaaagcaacc aatgtgtgga tgtggacgag tgtgcaacag 420
attcccacca gtgcaacccc acccagatct gcatcaatac tgaaggcggg tacacctgct 480
cctgcaccga cggatattgg cttctggaag gccagtgtct agacattgat gaatgtcgct 540
atgggttactg ccagcagctc tgtgcgaatg ttcttgatc ctattcttgt acatgcaacc 600
ctgggtttac cctcaatgag gatggaaggt cttgccaaga tgtgaacgag tgtgccaccg 660
agaaccctg tgtgctcgag                                     680

```

<210> 821

<211> 414

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (291)

<400> 821

```

gaattcggcc aaagaggcct acttatgttg ggattgcttt tggtgttat tgggtgacct 60
gtgtatcttc gaagaagtaa tatggaattt ctctttaata aaactggatg ggcttttgca 120
gctttgtgtt ttgtgcttgc tatgacatct ggtcaaatgt ggaaccatat aagaggacca 180
ccatattgcc ataagaatcc ccacacggga catgtgaatt atatccatgg aagcagtcaa 240
gcccagtttg tagctgaaac acacattgtt cttctgttta atggtggagt naccttagga 300
atggtgcttt tatgtgaagc tgctacctct gacatggata ttggaaagcg aaagataatg 360
tgtgtggctg gtattggact tgttgattta ttcttcagtt ggatagctct cgag 414

```

<210> 822

<211> 205

<212> DNA

<213> Homo sapiens

<400> 822

```
gaattcgcgg ccgcgtcgac gtgggaggaa ataggtgggc tgaagaggag gaaaaggaga 60
gctagctctg tggctgtgtt tcaaacagaa atatttgatt ttagtcaga aaaaaagagc 120
agtttggtta ttgaaatgc caagtttctt ggtttatttt tgggttttgt tattgttttt 180
tggtaaagaa taccgttgtc tcgag                                     205
```

<210> 823

<211> 355

<212> DNA

<213> Homo sapiens

<400> 823

```
gaattcggcc aaagaggcct actttttgta atttaaacac tgagagaagc ccaaattggt 60
ttcaaagtgt tattttttct tactgatata gcaaggatc tgagcacatc aagcttgaga 120
ttgcagggga gaagcaggaa cattactggc ttacacaagg aaaggggcag ctattcagac 180
acgaataact gctgcactgt ttggtataaa ttgtcacaat ttcagaagag attccttagat 240
gttagtgaga aaaacatact taactttcct ttgcatttgt ttacattata aagaagtatc 300
tgccttattg gcattctgcc tgtcagtgc ggtcaatttg aaagagggaac tcgag       355
```

<210> 824

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (32)

<400> 824

```
gaattcggcc aaagaggcct agctaatttt tnttgatatt ttagtagaca cgggggtttca 60
ccgtgttagc caggatggtc ttgatctcct gagcttgtag tccgcccgcc acggcctccc 120
aaagtgtgtg gattacacgc gtgagccacc gcgcccggcc tgtactgtta ttcttattgc 180
ccttttatac ccactagtgg ttgggaagtt attcattcaa catcttttag tgttattcac 240
tttttaaaaa gttgaagtac agcatacata gagaaaagtg tgcctccag ctttttattt 300
tattttattt tttttttagg cctctttg                                     328
```

<210> 825

<211> 101

<212> DNA

<213> Homo sapiens

<400> 825

```
gaattcggcc aaagaggcct actcccatcc ctccaaattc caggaaaaaa attttgagta 60
tgctgataaa ctactgcaa ggtctcatac actcactcga g                                     101
```

<210> 826

<211> 394

<212> DNA

<213> Homo sapiens

<400> 826

```
gaattcggcc aaagaggcct aatcataaaa ttggaagtct tgtatgaatt ctttctcagt 60
cctgattctt tccttgttct ctttgcttat aggtggtgtt cggatggttt acccttcagc 120
atttgttttg atctctcaga atgacatccc ggttcctcag agtggttgcca gtgctggagg 180
ccacattgca gttgggcagc aagggtttgg tagtgtgaag gacccaagta actgtgggat 240
gcctctgacc cctccacct ctccagaaca ggctatccta ggtgagagtg gaggtatgca 300
gagtgtctgc agtcacctgg tttcccaaga tggagggatg ataacgatgc acagtccaaa 360
gagatcgggg aagattcttc caaaactcct cgag                                     394
```

<210> 827

<211> 323

<212> DNA

<213> Homo sapiens

<400> 827

```
gaattcggcc aaagaggcct aaaggaagcc aatctaaca tgtgtgagtt cagaaacctg 60
tcagccaaaa tggggtagca gattttgatg attttgattg ttgaaggggc ccttgcacta 120
tcacttttca ttccttttga taggaagttt tcacacatgg aaagcctgga cctgtttggc 180
ttatattcat acatacacac ataggtatat gtcaaaataa ctactttgta atttttttaa 240
tagcattttg tgaacatttt ccatgtcatt aaatattatt ctacgatagc atttcccata 300
tgtctttaga acacaaattc gag                                     323
```

<210> 828

<211> 286

<212> DNA

<213> Homo sapiens

<400> 828

```
gtcagaaaac ctctagtgtc acatataaag tgaggctgcc taacataaag actgagcgag 60
gcaccacctt atcaattaga cattaactca atttttcttc tacgttaagg agtcatttta 120
aataagagct gtaaaatctt cctcctgtgt tccaagggat tgttttttac atccctcctt 180
gcagtgtgcc agttcttctt ttggagagca ctgatctcag aaaaacggga agaggctgta 240
tttcttgatt ggcagtatga aattaatatt cagggaagta ctcgag                                     286
```

<210> 829

<211> 484

<212> DNA

<213> Homo sapiens

<400> 829

```
gaattcggcc aaagaggcct aggttcagag cacaaatcta cagttaggtt gcttgggttc 60
cagtggcaga tctaccactt actataatag ttgtgtggcc tttgaattaa cctctccaac 120
cagtttcttc acatgtaaag tggggataat aatagtgcct gcctcaggat tactttgagt 180
atttatgaa ttaatgtaca tacaattatt ataatagtag atgcatgtg gaagtgtctat 240
taatgttaat agtcatttcc attagcagca gcagcagcag attctccagc attcaccttg 300
ttctccttgt gaagatcatt tgataagtct ctctctcttc ggtgttacag aatctgatta 360
cctcaacagt tgggtttcct gatttggtat ttgcaagtag caaatgtcat ctacaaagac 420
agtactgttt cctagacttt cctaccactt tcaagtctac tgccagggaa aatgactact 480
cgag                                     484
```

<210> 830

<211> 321

<212> DNA

<213> Homo sapiens

<400> 830

```
gaattcggcc aaagaggcct aagatcatga attatgacga atttcagcac tgttgagca 60
agttcgtgta cagccaaaga gagctatttg agccttgga taatctgcct aaatattata 120
tattactgca catcatgctg ggggagattc tcagggtgagg gtctccctcc aggetcatcg 180
cctcgctcct ctacacctct gctcactctc ttgaggctcc ccctctgttc cagaccaggt 240
cctctcctgg ccaggccctc ctgccttccc tcctgcccc tgctgcctc cgtggttaca 300
ctcctcacc cactactga g                                     321
```

<210> 831

<211> 340

<212> DNA

<213> Homo sapiens

<400> 831


```

gaattcggcc aaagaggcct accggccttt gtacgatgcc taccagcctc agtactcttt 60
gccgtaccca ccggagcctg gcgcagcctc cctctattac caggatgtct acagcctcta 120
tgagccctga tacaggccct atgatgggtg tgcgtctgct tacgccccaga actaccgcta 180
tcccagagccc gagcgggcca gctcccagc cagccactcc tcggaacggc cacctcccag 240
gcaaggatat cctgaaggat actatagttc caaaagtgga tggagcagtc agagcgatta 300
ctatgcaagc tattactcca gccagtacga tatcctcgag 340

```

<210> 832

<211> 497

<212> DNA

<213> Homo sapiens

<400> 832

```

gattcggcca aagaggccta gcaatgaaca aggaacatca taatggaaat ttcacagacc 60
cctcttcagt gaatgaaaag aagaggaggg agcgggaaga aaggcagaat attgtcctgt 120
ggagacagcc gctcattacc ttgcagtatt tttctctgga aatccttgta atcttgaagg 180
aatggacctc aaaattatgg catcgtcaaa gcattgtggt gtctttttta ctgctgcttg 240
ctgtgcttat agctacgtat tatgttgaag gagtgcacat acagtatgtg caacgtatag 300
agaacagtt tcttttgtat gcctactgga taggcttagg aattttgtct tctgttgggc 360
ttggaacagg gctgcacacc tttctgcttt atctgggtcc acatatagcc tcagttacat 420
tagctgctta tgaatgcaat tcagttaatt tccccgaacc accctatcct gacagatta 480
tttgtccagt actcgag 497

```

<210> 833

<211> 380

<212> DNA

<213> Homo sapiens

<400> 833

```

gaattcggcc aaagaggcct aatcagttct gcgaaggaga tggttggtca gaagatgaag 60
tacagtattg tgagcaggaa ctgtgagcac tttgtcacc agctgagata tggcaagtcc 120
cgctgtaaag aggtggaaaa ggccaagggt gaagtcggtg tggccacggc gcttggaaac 180
ctggttgttg ctggatgctc ttttgcgatt aggagatacc aaaaaaaagc gacagcctga 240
agcagccaca aaatcctgtg ttagaagcag ctgtgggggt cccagtggag atgagcctcc 300
cccatgcctc cagcagcctg accctcgtgc cctgtctcag gcgttctcta gatcctttcc 360
tctgtttccc aactctcgag 380

```

<210> 834

<211> 235

<212> DNA

<213> Homo sapiens

<400> 834

```

gaattcggcc aaagaggcct agctgaagat gcgagatatt gctgggcagg ccctggcttt 60
tggtcaggat cttgtgacgg ctcttctaaa ctttcatacc tacacagaac agaggattca 120
aatttttcct gttgattctg ccattgacac tatactctca ttgaatcaga agttctcaca 180
ataccttcat gaaaaatgcgt cctatgtccg cctctctgag gaaggaacgc tcgag 235

```

<210> 835

<211> 309

<212> DNA

<213> Homo sapiens

<400> 835

```

gcgatcgaat tctagacctg cctccagcct gggcaacaag agttgtctca aaaaacaaaa 60
aagaagaaaa gaaaaaaaca gccacagttt catcagcaca gcaaaaagggt ttttgttttt 120
gctcttgat tttgtcgttt ggtttttgct taatatcaaa tatccagtca gtgtaaactc 180
gtttataatt tggtcctttg atttcaagga gctatgatgc agttcgttgt ggggatgtgt 240
tgtctccatg tcatacatgt gactttgtcc atgtttgcac ccagttcaag gaagacacaa 300
aacctcgag 309

```

<210> 836

<211> 271

<212> DNA

<213> Homo sapiens

<400> 836

```
gaattcggcc aaagagaatt ctagacctgc ctcgagaggt gaccgcaaac tgcctccaga 60
gtacaacctt cccacacctt acgttgaaat gcagtcactc cagattgctg ccttcctttt 120
cacggctctgc catgtggtga ttgtgtcca ggactgggtc acagacctca gtctctacag 180
gttcctgcag acagcagaga tggatgaagcc ctccacccca tccccagcc acgagtcag 240
cagctcatcg ggctccgatg aaggcatcga g                                     271
```

<210> 837

<211> 422

<212> DNA

<213> Homo sapiens

<400> 837

```
gaattcggcc aaagaggcct agaataaaca agcaaagaaa ctacttggtta cactcatgcc 60
ttctccagtc tgtattattt gccagggtatt tgggaaacaa atttgaatga ggtgtcaacc 120
ccacccttaa agttgtctca gcatacttag agggatagaa aaataagtag ataattagca 180
catgacttca taaatcacat gtgtttatat ttatcatggt atgacagcat tagagaaggg 240
atactaagtt aactttgcct gggttactaa gtattagcta taaaagttct aagatactat 300
tcttctctgg agagttaaat cactagggaa gacaggatgt gttatggaaa gaaaacatat 360
ataaaggcaa gaagatgaga atgtatatag tgttttcagg aagccgtaag aagatactcg 420
ag                                     422
```

<210> 838

<211> 448

<212> DNA

<213> Homo sapiens

<400> 838

```
gaattcggcc aaagaggcct agcagctcct tatcatgggg acaattcctc tctttcgaaa 60
accacaaaga tccttttttg gcaagttggt acgggaattt agactttag cagctgaccg 120
aaggctcctgg aagatactgc tctttggtgt aataaacttg atatgtactg gcttcctgct 180
tatgtggtgc agttctacta atagtatagc tttaactgcc tatacttacc tgaccatttt 240
tgatcttttt agtttaatga catgtttaat aagttactgg gtaacattga ggaaacctag 300
cctgtcttat tcatttgggt ttgaaagatt agaagtcctg gctgtatttg cctccacagt 360
cttggcacag ttgggagctc tctttatatt aaaagaaagt gcagaacgct ttttgaaca 420
gcccagagata cacacgggaa gactcgag                                     448
```

<210> 839

<211> 295

<212> DNA

<213> Homo sapiens

<400> 839

```
gaattcggcc aaagaggcct agtttacaat cattgttcta gacattatta gataatttta 60
atccagtaac ttcatttttc aattctgggt aaattttctt gtatcatttg ataatttcgg 120
cctcccaatc tttttctttt tctccttttg ttctatgctc cggggacatt ctttaactat 180
tatcttaciaa tctctccatt ggatttttgt tgccatattt ttaacttcca aatgcttcat 240
tgggctgggc gcgggtggctc acacctgtga tcccagcact ttgcgtagac tcgag       295
```

<210> 840

<211> 333

<212> DNA

<213> Homo sapiens

<400> 840

```

gaattcggcc aaagaggcct agaaatattt atcaaccatt ctttgctaaa gttatctaca 60
gtttggcaaa ggcaaggaa aaaaatacac cagtagccat catattttga caatattata 120
agaagtaagt gctttgagaa ttcataagag aaagagaagc ttacatttg aggagctcaa 180
gaaacaattc acattaaata tatcatttga gattgacttt gataaaaaaa gtaattttag 240
tggatgaaac tgggtgtgga tgaattcgtc agtgtgtgtg tgtgcgcatg tgtgtgtatg 300
tgtgtgtttt tgaggacaag gaagcaactc gag                                     333

```

<210> 841

<211> 605

<212> DNA

<213> Homo sapiens

<400> 841

```

gaattcggcc aaagaggcct agggggagaa gaggaagagg ccgttgctgt ccaggaagag 60
gcgcttgccg ttctgggtgca ggacgagggc cagcatggcg aagaagtga gatgaagagg 120
atgaagatct ggcctcggt gaccaggtag cagtagtaca ggccactggg tgccaccagg 180
agcagggcag gccctggaat caagctctca gctttagagg cagtaaagca gccgctgaag 240
tacatgaaga ggatgaggaa gaaggggatg taccacatgc agtgaccag gtactcatca 300
taatagtaga gcagctcaa ggagtcgagc agcgtctccg gcttgagatt cttgatgatg 360
gggtttctac ggacagacag gtggtgctgg tagccactga agagcaggcg gtggttgaca 420
gagtcaccca ccagggtggat gctggcacc atgatgaaga tgatgatgct cacgtacgtg 480
atggagcgtg gcagggtgag gggggaccgc tcgatgagct tgagcaagag aaagggcgtg 540
atgacgttgt aggccatgtg gaagtagtcc ccaacactgg gcttggtgag tggaaaccac 600
tcgag                                     605

```

<210> 842

<211> 297

<212> DNA

<213> Homo sapiens

<400> 842

```

gaattcggcc aaagaggcct aatctcatcc aaattcctag gggctgatca ctcttctgtc 60
ctaaaaataa aacaaagcca aaacttctgc tcccttttga agcactacca tccttctttc 120
ctccagagct ctgccactg ttttactttc tccctccac ttcaggctaa agctcacttt 180
gctctgccag acctgttctc agcaaggatt cttttgtttt tttaaaccta cgtaatgatt 240
atccccatact attgtgtcct attttttctc ttttctatgt atctgactcc actegag 297

```

<210> 843

<211> 362

<212> DNA

<213> Homo sapiens

<400> 843

```

gaattcggcc aaagaggcct aggtgttttc atttggtgat caggactgaa cagagagaac 60
tcacccatgga gtttgggctg agctggcttt ttcttatggc tatttttaaa gatgtccagt 120
gtgggggtgca gttgttagaa tctgggggag gcctcgtaga gccggggggg tccctgagac 180
tctcctgtgc agcctctgga tttagtttta ccagctatgc catgacgtgg gtccgccagg 240
ctccggggaa ggggctggag tgggtctcca ccattactgc tgctggaacg accacgtact 300
acgcagactc gtttaagggc cgggtggacca tactcaagga cacttcggac gatacactcg 360
ag                                     362

```

<210> 844

<211> 298

<212> DNA

<213> Homo sapiens

<400> 844

```

gaattcggcc aaagaggtag tcatggctct catgtgcaag aaaatgaagc acctgtgggt 60
cttcctcctg ctggtggcgg ctcccagatg ggtcctgtcc cagctacacc tgcaggagtc 120
gggcccaggg cagggtgaagc cttcggagac cctgtccctc gcctgcactg tctctgctgg 180
taccatcagc agtgggaggg atcagtgggg ctgggtccgc cagccccag ggcagggact 240

```

agagtggatt gggcatgtct tttctactgg gagaccctac tacaaccgt ctctcgag 298

<210> 845

<211> 385

<212> DNA

<213> Homo sapiens

<400> 845

gaattcggcc aaagaggcct aattttaagt atttgcaata aatatatgta tatagattgt 60
atgtattcct atattcttat ttttcatttt attattaagt aaaagatcat taaaagtga 120
aataaaaacc ttggagtttt ttggtgaatc ttgaggttta acatacatct gagagtggcg 180
tgggtaagag tcctcagtta ctgccttata ctccatggg atggttccca cagattgtat 240
ggaagagagt aaaatgagga acttgggtgat aaatcagggt agtgattttc ttttgggaatt 300
taagtaaaac tgattaaatt ttccttatct gtctgtctcc atgttttctc ccttaatctg 360
ttttgtctcc taacccccac tcgag 385

<210> 846

<211> 313

<212> DNA

<213> Homo sapiens

<400> 846

gaattcggcc aaagaggcct agggattttg ctactaatt taaactgaaa tgetggttgc 60
tactagaagg atcctattcc ttgtcagttg ctggcagaat tcccttgcca acctcccaa 120
ccacacaaaa tccttccttg ctgttagggc ctacatttc tgcaaaagta tccctttgac 180
cctggccggg ctgcggccata ctaatgtagt ttcttatctg ttggattatc caaataatgt 240
tctgtcagtt cccaccacag atgtgtctca gctccctcca ccttctcaag atcagtctca 300
ggtaaagctc gag 313

<210> 847

<211> 268

<212> DNA

<213> Homo sapiens

<400> 847

gatgcgagcg gctggaactc tgctggcctt ctgctgcctg gtcttgagca ccaactgggg 60
cccttcccca gatacttggt cccaggacct taactcacgt gtgaagccag gatttcctaa 120
aacaataaag accaatgacc caggagtctt ccaagcagcc agatacagtg ttgaaaagtt 180
caacaactgc acgaacgaca tgttcttggt caaggagtcc cgcatcaca gggccctagt 240
tcagatagtg aaaggccgga acctcgag 268

<210> 848

<211> 306

<212> DNA

<213> Homo sapiens

<400> 848

gaattcggcc aaagaggcct attgaattct agacctgcca cagtaatgct atatatttct 60
gagcattggt tttctctaga taattttata tttttgagta taccccactt ccaagtgttt 120
tttgttttgt tttgctttgt ttttgttgtt gttgttttga gacagggtct cactgtgtcc 180
cccaggctgg agtgacgtgg cacaatgacg actcactgca gcctcaacct cctggggcca 240
agtgatcttc ccacctcagc ctctcaagtg gctgggacca cagaagtgca ccaccacgag 300
ctcgag 306

<210> 849

<211> 516

<212> DNA

<213> Homo sapiens

<400> 849

```

gaattcggcc aaagaggcct aggtggacag aagtgtttt ctaatattha aagtacttaa 60
cagtaataat taggctgggc atggtggttc gggcctgtga ttgcagcact ttgggaggcc 120
gaggcaggag gatcacttga agctgggaga tggagaccag cgtgggcaat aaagtgagac 180
ctcatctcta ccaaaaaaag gaagggaaaa tagctgggtg gcctgtagtc ccagccactc 240
gggaagctga ggtgggaagg atcgccctgag cccaagaatt caagtgtgtg tgacccgtga 300
tcgtgccact gcattccgtc ctgggtgaca gagtgagacc ctgtctcgaa agaaagaaaa 360
aacaataatt ctggtatttc aatagagggt tggagacag ctggaatcta atctgcttga 420
agcagtcaaa cttgatggca ttttgtgagg cattatgctg gttgttcacc ccttgttata 480
ggttttcttc acgtatttac tccacatagt ctcgag 516

```

<210> 850

<211> 298

<212> DNA

<213> Homo sapiens

<400> 850

```

gaattcggcc aaagaggcct acatttcttg caagcttcca ttttcttct gtttggacat 60
taatagcaat aatttttga tattctggac taaaccgttt ctggggccac ttgaaataaa 120
aataccactt ttaaagtgc tattcagttc attgagaacc agttaatccg tatccaagga 180
atcaccttca aaacaacaa acaaaaaaaa tccttgaact tcagctatgt atatcagaaa 240
tatgacaacc ctactgtttt tacaattaga ttttgtatgg cagacaggaa cgctcgag 298

```

<210> 851

<211> 209

<212> DNA

<213> Homo sapiens

<400> 851

```

gaattcggcc aaagaggcct aattataatt ttgttgtatt tgtttcttag gagcaagtgt 60
tcctgtctgc agttctttcc tctttaggcg tggttgagaa aaagcagaaa ctttacataa 120
agctgtatth cttaatcatc ttttaattga aacttaagaa aargaattta tctctgttata 180
tttatgtaac ttatttcttg gaactcgag 209

```

<210> 852

<211> 358

<212> DNA

<213> Homo sapiens

<400> 852

```

gaattcggcc aaagaggcct atgtaaatcc aagtatcact actgttttcc tcctcataat 60
gcccttaaag caaatatttt ccttgctttc tataatcgga aagaggatcc tgagagtatc 120
ttggctccat accactttat ttttttgtct tttctttttt tccctctgtg ggagaacaga 180
gtctcactat gttgcccagg caggtcttga actcctgggc tcaagcaatc ctctttcctc 240
tatctcctta agtgctgaga ttccaagtgt gagccaccat accactttaa actccctaaa 300
gggagggtcc ttatctgcaa ctcccacagc caccctcgcc ctatcccac aactcgag 358

```

<210> 853

<211> 261

<212> DNA

<213> Homo sapiens

<400> 853

```

gaattcggcc aaagaggcct atattaatca ggactttgtg ggggacagaa gcccaattaa 60
aactatctta ggcaaagggt agaatttga atagggatgt taggtttctc aactaataac 120
caaaccatga gcagggtgga atgcatctgg ttcttaggga tgattttgat gctgtcagag 180
cactctttca gtttatttca ttctctcat tgcgcattgt cagaaagcat aatccccagc 240
aactctctag agacgctcga g 261

```

<210> 854

<211> 242

<212> DNA

<213> Homo sapiens

<400> 854

```

gaattcggcc aaagaggcct acacaaaaga aggtgaggtc tcagttatag cgaggacccc 60
ctactcattc acagagggtc cctgcagagc gtcccacccc agtgatgcc agtgcattgc 120
actgccccac cctggtcctt ctcagcagca tgtagcatc gctggtcctt gccagcccc 180
ttctctgtcc ccatttcctc ttctctcctt gtctctctca ccccagcac tcgccccctg 240
ag                                                    242

```

<210> 855

<211> 242

<212> DNA

<213> Homo sapiens

<400> 855

```

gaattcggcc aaagaggcct aactcagtgt gatttttaga aaaagaaaaa ctcggtgggc 60
tcatatcttt tgacagttgt ttgtgaataa tacctcctcc aacaaccttc ccagtactca 120
actgctatgt aagaatgctt tcttatgttg taaatgtctc agtattttgc tgcttggtat 180
ttgttcagtt tccttgata tctcagggtc agaaagaatc aggcctttct ccaactctcg 240
ag                                                    242

```

<210> 856

<211> 296

<212> DNA

<213> Homo sapiens

<400> 856

```

gaattcggcc aaagaggcct acgagaattg gggcaggtct tccccatgct gtttcattgat 60
agtgaatgag tctcatgaga tctgatggtt ttgaaaacag gagtgtgcct gcacaagctc 120
tctctctttt ttgtgtgcca tccacataaa atgtgacttg ctctccttg ccttctctca 180
ggattgtgag gcctcccccag ccattgtgaa cagtaagtcc aataaacctc tttcttttgt 240
aaattgcca gtctcaggta tgtcttcac agcagaatga aaatagacgg tttagg      296

```

<210> 857

<211> 324

<212> DNA

<213> Homo sapiens

<400> 857

```

gaattcggcc aaagaggcct agtggaat atcttatttc ttttttcaat tttaaaggct 60
tcctgttttt ttacccttgt atattatcag tgaaaaggat caacagttaa tttgagccaa 120
gtaataaaaag aaattctgca ttgtcacga agacaattta tggtagacag ataaatacac 180
agattacagt gtaaagtctc catttaacct gtttataaaa gatacaaggc cacactaaac 240
tactcagtgg gatttatata ttccatccac ttgaacaat aaacagtaat gtatccaaga 300
agattatgtg tcctatgtct cgag                                324

```

<210> 858

<211> 252

<212> DNA

<213> Homo sapiens

<400> 858

```

gtggacctcc tgcacaagaa catgaaacac ctgtggttct tcctcctcct ggtggcagct 60
cccagatggg tcctgtccca ggtgcagctg caacagtggg gcgcaggact gctgaagcct 120
tcggagaccc tgtccctcac ctgcggtggt tatggtgggt ctttgaccgg gtactactgg 180
gcctggattc gccagcccc agggaagggg ctggagtggg ttggcgaggt cagctttagt 240
ggaggactcg ag                                                    252

```

<210> 859

<211> 294

<212> DNA

<213> Homo sapiens

<400> 859

```

gaattcggcc aaagaggcct actcatggac cgctgcaca agaacatgaa acacctgtgg 60
ttcttctctc tgctgggtggc agctcccaga tgggtcctgt cccaggtgga actgcaccag 120
tcggggcccag gactcggttaa accttcggag atcctggccc tcacctgcac tctctctggt 180
ggctccatcg ctcttatta ttatttttgg gtccggcggc ccgccgggaa gggactggaa 240
tggattggaa gtgtctttgt cactgggacc tcaaagacta atccctcgct cgag 294

```

<210> 860

<211> 332

<212> DNA

<213> Homo sapiens

<400> 860

```

gaattcggcc aaagaggcct acaatcttca tcatgacctg ctcccctctc ctctcacc 60
ttctcattca ctgcacaggg tcctgggccc agtctgtatt gacgcagccg ccctcaatgt 120
ctgcggcccc aggacaaaag gtcaccatct cctgctctgg aaccagctcc aacgttgga 180
cacattatgt atcctgggtat cagcaattcc caagatcagc cccagactc gtcatttatg 240
acacttctgc gcggccctca gggattcctg accgattctc tggcgccaag tctggcacgt 300
ctgccaccct gaccatcacc ggaccactcg ag 332

```

<210> 861

<211> 291

<212> DNA

<213> Homo sapiens

<400> 861

```

gaattcggcc aaagaggcct attcttgttc aacttctaaa gagaaattgg agaagataaa 60
actggacact ggggagacca caacttcatg ctgcgtggga tctcccagct acctgcagt 120
gccaccatgt cttgggtcct gctgcctgta ctttggctca ttgttcaaac tcaagcaata 180
gccataaagc aaacacctga attaacgctc catgaaatag tttgtcctaa aaaacttcac 240
attttacaca aaagagagat caagaacaac cagacagagg catggctcga g 291

```

<210> 862

<211> 208

<212> DNA

<213> Homo sapiens

<400> 862

```

gaattcgcgg ccgcgtcgac gattcttatt ctcttgggga atagtctaga ttttaaaaca 60
ttttcttctg ctccctagaa tgtctgcatt ttttttgttt ttgatacggg gtcttgctct 120
gtcaccaggg ctggagtgcg gtggcgcgat ctcatatcat tgcaacctct gcctcccgtg 180
ttcaagcaat ctccccacc tcctcgag 208

```

<210> 863

<211> 271

<212> DNA

<213> Homo sapiens

<400> 863

```

ggagaaaatt tgtaacaact ctgagcacat gctgggtgaa gtcacagctc aaggaaagat 60
aaagctgggc ggaaggaggt gtgcgtggct tctggggtgg gaccagagg ggaggctctg 120
ggacaggggc tggggttcag tgccagggcc ctgaggaaga aatggggact gatctcaaaa 180
ttccagaatt ccctgtacat ctgttcacgt gcttgtgtcc aggtgtgact tgtaaaactgt 240
ctagtgtttg cattaataaa tgacactcga g 271

```

<210> 864

<211> 235

<212> DNA

<213> Homo sapiens

<400> 864

```
gaattcggcc aaagaggcct aaaaaaaca atttagttcc acacatcgta ctgtatacaa 60
ttccatgttt ttgttttttt gtttgtttgt ttgttttaga cagggttcttg ctctgtcacc 120
cagtctggac tgcagtggta tgatcatggc tcaccacggc ctcaacctcc tgggctcaag 180
caacctcctt gcttcaccct ctgtggtagc tgggaccgag gacacgcaac tcgag      235
```

<210> 865

<211> 153

<212> DNA

<213> Homo sapiens

<400> 865

```
gaattcgcgg ccgcgtcgac ggtaacttgt tccctaaact gtccttatag ttaaataatat 60
atattaaaaa aaactataag ttaaaataac attcagattg tatagcatag gctgatgcat 120
tttaaaacaa tatttacaat attacccttc gag                      153
```

<210> 866

<211> 282

<212> DNA

<213> Homo sapiens

<400> 866

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctatacctgc ctcaagtcta 60
attctgtatc ctgaacctct cttaacacat cccctctgct ccagtcccat ggtaggcctt 120
ggctactgca gctgcctcct aacatgcttc ccggcttcta gtctctcccc acaccactca 180
gcagccttcc caaatggcag atcagcacct gaggccctgc tacagtccct gcaggggctg 240
ccgcagggcg acagccact gtgctttgct gggttgctcg ag              282
```

<210> 867

<211> 243

<212> DNA

<213> Homo sapiens

<400> 867

```
gaattcgcgg ccgcgtcgac ggggtttgta ggtggagctg catacctgtc agttttcccc 60
attatttcat catcagtcag aggtgacttt gacatgtcct ttctttgtcc agtggttact 120
ctgcaggcca ctgccctcac tactctgggt catgtcttct gtgtgctttt gttgttcag 180
ctttgccttt catgccctag tgatttcctt gttaaaatgc cacatcccct ctteccactc 240
gag                      243
```

<210> 868

<211> 188

<212> DNA

<213> Homo sapiens

<400> 868

```
gaattcgcgg ccgcgtcgac cattctctta tgtggacatc acaatttacc tgttctccca 60
gcagtggata tttgtgttgt ttccagtcac ttgctgttat ctcagtgttt ataaatgatt 120
gtttctctta caccaggaa ttccattcct gggttatggg ttatgcttat tatgctcacc 180
aactcgag                      188
```

<210> 869

<211> 198

<212> DNA

<213> Homo sapiens

<400> 869
gaattcgcgg ccgcgctcgac ctctttgagt ctggagtctt acgttcttcg gtttttaggga 60
atgctgtttg atgatttctt gacctttttt tcttcccttt ccagactcag gatactgggc 120
ctcttagact catgtatttt tatttttatt ttctctctca ttctctggct ttccttgaaa 180
cctcccccat acctcgag 198

<210> 870
<211> 271
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (93)

<220>
<221> unsure
<222> (147)

<400> 870
gctcatgtgc aagaaaatga agcacctggg gttcttcctc ctgctgggtg cggtctccag 60
atgggtcctg tcccagctgc agctgcagga gtngggccca ggactgggtg agccttcgga 120
gccccgtcc ctcacctgca ctgtgtntgg tgggtccatg aggagtagtg gttactactg 180
gggctggatc cgccagacct cagggagggg cctggaatac attgggagta tctataacaa 240
tggggacacc tactataacc cgtccctcga g 271

<210> 871
<211> 296
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (166)

<400> 871
gaattcggcc aaagaggcta atggatctca tgtgcaagaa aatgaagcac ctgtggttct 60
tcctcctgct ggtggcggt cccagatggg tcctgtccca gttgcagctg caggagtcgg 120
gcccacaact agtgaagcct tcggagacct tgctcgtcac ctgcantgtc tctgggtggc 180
ccatcagcag tagtccccac tactggggct ggatccgcca gccaccaggg caggggctgg 240
agtggccttg gaatgtctat tatggtggca gtagttacaa caatccgtcc ctcgag 296

<210> 872
<211> 275
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (251) .. (252)

<220>
<221> unsure
<222> (257) .. (258)

<400> 872
gcatggacct cctgtgcaag aacatgaagc acctgtgggt tttcctcctg ctgggtggcag 60
ctcccagatg ggtcctgtcc caggtgcacg tgcaggagtc gggcccagga ctgggtgaacc 120
cttcggagac cctgtccctc acctgcggtg tgtctgggta ctcttcaga agtgggttact 180
attggggctg gatccggcag tccccaggga cggggctgga gtggatcgga agtatctatc 240

ataacggagt nnccttnnac aaccggtccc tcgag

275

<210> 873

<211> 110

<212> DNA

<213> Homo sapiens

<400> 873

gaattcgcgg ccgcgtcgac ctaggatcct aggaaagaat gcaaagtgtg acaacattat 60
ttacacatgt tctgattgta acaaataatc tcaactgtatg ggggtctcgag 110

<210> 874

<211> 264

<212> DNA

<213> Homo sapiens

<400> 874

gaattcgcgg ccgcgtcgac gccaggagaa gtattggcag gctttagggt attaggtggt 60
tactctgtct taaaaatgtt ctggctttct tccctgcaccc actggcatac tcatgggtctg 120
tttttaaata ttttaattcc catttacaaa gtgatttacc cacaagccca acctgtctgt 180
cttcagggtcc cagggtcaagt tcatggacct gagatgctcg caagggggat ggtgcctctg 240
gatccagttc aggcgtctct cgag 264

<210> 875

<211> 268

<212> DNA

<213> Homo sapiens

<400> 875

gaattcgcgg ccgcgtcgac attaaattag ataagggtata ttcagcccct ggaatagtga 60
gaattaacaa ttggtaattgc ttgggtttac ctccctgacc ttgcataaac catgcatggc 120
tgaactcacc ctgtccctgc ccagattttg cactgttgag attatgaggt acttcctaata 180
ggttgctgca gctgcagccc ataaaacagc tctttgtgtg tatgaagaaa atcataataa 240
gaggggcctc cagagccaaa ctctcgag 268

<210> 876

<211> 356

<212> DNA

<213> Homo sapiens

<400> 876

gcctcgagct cctccctgaa gccacaaatc tgagggtcac atttgagtc tctcccttct 60
ttacttctat gtccaacagg ttaccaattc aatcttatag tcttttccag gggctgtgct 120
cttgccctgg ggtggtcttt tctctcctta cctggctgac agttacttgt ctctccgcag 180
gggatcatgt tcggaccccc aggccagccc actgctgctc cttggcactt tcacggccct 240
ggcgtgtccc cgtcatagcc cttatcagtc ccttgatatt acctgggtcac cctccatctc 300
tgagggtatg ggggccagat ggctcttgct gccctgatgt tttgaggat ctcgag 356

<210> 877

<211> 228

<212> DNA

<213> Homo sapiens

<400> 877

gaattctaaa taaaaaattg ttccggaggct gcaatgcgtg tcaaacatgc agtagttcta 60
ctcatgctta tttcgccatt aagttgggct ggaaccatga ctttccagtt ccgtaatcca 120
aacttttggtg gtaacccaaa taatggcgct tttttattaa atagcgctca ggcccaaac 180
tcttataaag atccgagcta taacgatgac tttggtattg aaacaccg 228

<210> 878

<211> 193
 <212> DNA
 <213> Homo sapiens

<400> 878
 gaattcgcgg ccgcgtcgac ggttctgctt aatagtggaa taaaatcata caatccaaca 60
 cataatgttt agtatgacta gacagcccca atacttgggtg tacagtagat gtcattgag 120
 ggtttaccac atgatcacgt tcttctcata cctgatgcag accataaaaag gttcgagtct 180
 cccctccctc gag 193

<210> 879
 <211> 263
 <212> DNA
 <213> Homo sapiens

<400> 879
 gaattcgcgg ccgcgtcgac gagttcccat tctgagcatc ccaggagaag caaggacccc 60
 ttttaaacctc tgtcagaacc tgttctctctt gggttcattg tcacattact gaatttcagt 120
 ttttctgtga tatgctgaaa ccccttattt tctgtgaact ttgtagaatt tccctttggt 180
 ctcaggaggt agcccttgat gctagagagg cttcagaact gagctctacc tttccccaga 240
 tccccaggga ggaggccctc gag 263

<210> 880
 <211> 237
 <212> DNA
 <213> Homo sapiens

<400> 880
 gaattcgcgg ccgcgtcgac ggaaattcta ggtgacttgc taattgtctt atttgggaata 60
 ctcccatttc tactaaagaa ttagtatctt tggatataaaa ataaggaggc agaccagttt 120
 tacaataatgc tgctggccag gagaataaca gtttctgcca ggtgagcagt taaaaaaaaag 180
 gcagactgga aaaataactg tggaatggtg tttcttattt acaaggcatt actcgag 237

<210> 881
 <211> 289
 <212> DNA
 <213> Homo sapiens

<400> 881
 gaattcggcc aaagaggcct aataaagaag taattagatt caacactcag atcactactt 60
 agtttagatt acattaagat tgttttggtt ttgaatgggg gatagaaaac cattttcctt 120
 ttattttatt tacttatttt tgagacagag tctcgctctg tccccaggc tggagtccag 180
 tggcatgcct cggtctgctg caacctccac ctcccagggt caagcagttc tccctgcccc 240
 accctccgag tacctgggat tgcaggtgcc tgacaccact gtctctcgag 289

<210> 882
 <211> 260
 <212> DNA
 <213> Homo sapiens

<400> 882
 gaattcgcgg ccgcgtcgac ctaaaccgtc gattgaatta gacctgcctc gaggacagcc 60
 tgggtgacaa agcaagactc tgtctccaaa aaaaccata aaaaaacaaa gaaaccccaa 120
 caaaattgtg cattaaacat atggatctgc ttttctggtt tgtgttctact tccctgcctg 180
 gcttgtgctt ctgtctgtg ctacccctc caggccctc ctgctggat cttgcccctc 240
 acctctgccg gcacctcgag 260

<210> 883
 <211> 357
 <212> DNA

<213> Homo sapiens

<400> 883

```
gaattcgcgg ccgcgtcgac atcagcccat ttttgtttct acatctgtgt gtgtagagct 60
ctggaataga attgttaagt ctgagcaaga aaaagcatag cgggttaagg acaagtgaaa 120
cgaagagaac cctctgtccc tggcagaatc tgcattgtaca tttcttgtct gtccttgtct 180
ctcttcttcc tgtctggccc attgcagaga gtattggaag tttccaacca ttggtgggtac 240
tctatgtcga tcctacctcc tttgctgaaa gacagtgtgg cagcgcacct gctgtctgcc 300
tactaccctg actgtgttgg catgagcccc tcctgcacca gcacaaaccg cctcgag 357
```

<210> 884

<211> 144

<212> DNA

<213> Homo sapiens

<400> 884

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctgacctgc cttttcccca 60
ctattccatt agacccaca aatgttagtt ttgtgtgtgt gtgtgtgtgt gtttttaatc 120
actgtaaccg gatgcaggct cgag 144
```

<210> 885

<211> 189

<212> DNA

<213> Homo sapiens

<400> 885

```
gtgtctttct gcatgtctct ttatgtctct atgtgtatct atctctctca gtctctcata 60
caagcatata cacactcagg atacctcgat ccagcagccg gagcaagcgg agataccaga 120
gataccactg gtcccagaag cgggtccgtca tcccacctg aactcatcct tcacagccag 180
tccctcgag 189
```

<210> 886

<211> 221

<212> DNA

<213> Homo sapiens

<400> 886

```
gaattcgcgg ccgcgtcgac actttgttta tgattttttt tttaattagc ctttgagtgc 60
tttttttgct tctgtcttac aagaatttca aatttttcta gaatccaact taccagtgtt 120
ttcctttaat gtggtgggtc ttagccctgg ctatgcacta tacacaggct tttatgttta 180
caaagctccc aagtgattct cctgtgacac tgacctcga g 221
```

<210> 887

<211> 250

<212> DNA

<213> Homo sapiens

<400> 887

```
gaattcgcgg ccgcgtcgac gctggaagct tttgaagatg gtttttgtgg gggcatgggtg 60
gctttatgtc tttatgectg tttctgttgc tgggagtctc cagggggcac agtgtgggaa 120
tcacatgcat gctctgcccc tccctgcttg tagaggggag gggacaggat gggtaaaagt 180
gggcgtgccc tccagcaatc ccggttgtca tccagcacgg acttcatcac tcctctgcca 240
tccctcgag 250
```

<210> 888

<211> 269

<212> DNA

<213> Homo sapiens

<400> 888

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctccagtgtc 60
ttctgaaacc ttgggggctg acacaagatc cttagtggtt tgggatgacc cttttcctgc 120
agactttctc cctatccct aactcatgca tggaaaacgt ttgtcaggct ggtttcccga 180
gcctcctgca cctcaacatc acgctcacc ttttggtgtt agcccagtg tatttagcaa 240
atttctccag ctgcaaggaa ggtctcgag 269

```

<210> 889

<211> 264

<212> DNA

<213> Homo sapiens

<400> 889

```

gaattcgcgg ccgcgtcgac cagagtaa at gcaacatttc ctctgtctaca tttccacaat 60
tctcactgtc gttctaccag gcctggcatg ttcttatccc agggactttg catttactat 120
ttcctctgcc tgcacaattg tatacctgag gcatacatgg ctagctctct cagttccttc 180
aggtcttcaa ccctccaaag tcaccttcac acagtgaagc cttccctggc catcttacct 240
acaatttcaa cccaaacact cgag 264

```

<210> 890

<211> 624

<212> DNA

<213> Homo sapiens

<400> 890

```

gaattcggcc aaagaggcct acccttcccc cgccgctccc gccgcctctc taaggagggt 60
atcctgcctc ccagcgccct ggatggggct ggcaccacgc ctgggcagga ggccactggc 120
aacctgttcc tacatcactg gcccctgcag cagccgccac ctggctccct ggggcagccc 180
catcctgaag ctctgggatt cccgctggag ctgagggagt cgcagctact gcctgatggg 240
gagagactag caccataggg ccgggagcga gaggtcctcg ccatgggcag cgaggagggc 300
atgagggcag tgagcacagg ggactgtggg caggtgctac ggggcggagt gatccagagc 360
acgcgacgga ggcgcggggc atcccaggag gccaatattg tgaccctggc ccagaaggct 420
gtggagctgg cctcactgca gaatgcaaag gatggcagtg gttctgaaga gaagcggaaa 480
agtgtattgg cctcaactac caagtgtggg gtggagtgtt ctgagccttc cttagccacc 540
aagcgagcac gagaagacag tgggatggta cccctcatca tcccagtgct tgtgcctgtg 600
cgaactgtgg accccaact cgag 624

```

<210> 891

<211> 790

<212> DNA

<213> Homo sapiens

<400> 891

```

gaattcggcc aaagaggctt acttaccctt tgctctgaat gtgtgggtta tgaccctcta 60
tgagcaaagg aatgagatta ctaggctttt cagaattaat gtttaaagag taagagggtc 120
agagggaagc cctgcaggat aagtgaagaa cagccactat ttgtgtgtaa gaaagtaaga 180
catccagttt gactatttgg aggccttcta ggtggatcct tgctctgtta gttagccgag 240
atcattggct gaagaaaagg cttgggataa atgcgggtgct gctgtatcag cccatatcat 300
gtactgttgc ataagtgaat ttatacaagt ggacagttgc tatgatcaag ttttcaaact 360
ttccatctca ttctgagttt aatgctctga tagtggttcag gtagaaagtc aactccaatt 420
ccttgtggac attcaccttt acactttaac accctgaacc ctggctttct gccaaaatat 480
tttctttccc agtggctgga aactgattag ctatagggga gaacaaagggt ggctttgtac 540
tggggcatat tgcttttgag aatttagcag agagcattca aatggagtcg ggatgtgatg 600
ccaaattatg cagatttgga gtttattttg gttagggttc ccatgagtag gtatgtaggc 660
aacgtaatac tgttctcagt ttatatggtc tggaaatttc cttataaatg ttatataggc 720
tttctttatt gattgtttta aaacacaaat atgtatgatt ttgagaaaac acattaccag 780
aaggctcgag 790

```

<210> 892

<211> 428

<212> DNA

<213> Homo sapiens

<400> 892

```
gaattcggcc aaagaggcct acttcacatt gtccccgttt catgccgttt cactccaccc 60
gcgtcgcttt tctttctccc ccttgtaatt tttatgaggg cgaatcctat gaaatggctc 120
attggaccgt tttctgtggt tcagcctatt tgctgttggc caaataacta gctgtggctt 180
ggttttttgaa attctctgca gatcagagct atagagctaa gagtgttgagt atgaagaagc 240
actgtttata catgcacgaa aagcgtgctt ttttgccttt ttttgttttg ttattgagat 300
ggggctctgt tctgtgccc tggctggagt gcattgatgc agtcgtagca gcctccacct 360
cccgggctca accgagcctc ccgcctcagc ctcttgagaa gctggggactc cagggggagg 420
ccatcacg                                         428
```

<210> 893

<211> 164

<212> DNA

<213> Homo sapiens

<400> 893

```
gaattcggcc aaagaggcct agtgaagggg attttttttt tcttttaaac tgaaggtggg 60
gtacatggtg cagctggttc tgtcattgct cagcctagtt ggcgtccagc ttggccattt 120
cctgcacata gatgcctata ctctcgctgt caaaaagcac gaag                                         164
```

<210> 894

<211> 419

<212> DNA

<213> Homo sapiens

<400> 894

```
gaattcggcc aaagaggcct aggtaggcct gagtgggctc agaaatgtct tttcattgat 60
tctacaaaaa gagtgtttcc aacccgttta attaaaacaa agatttaact ctgtgagatg 120
aatccaaaca tcacaaagca tttccacaga tagcttgctt ctagttttta tcaactggata 180
ttccggtttt cactataggc ctcaatgagc tcagaaatgt tccttcatag attctacaaa 240
aagcaagttt ccaagggtgat gaatcaaaac aaaagtttaa atctgtgatg taaatccaga 300
aaacccaaag cattttaact tatagcttgt ttctactttt taacatggaa tattcagttt 360
ttcattatag gcctcagtga gctctgaaat gttccttagt agatgctaca aaaagagtg 419
```

<210> 895

<211> 460

<212> DNA

<213> Homo sapiens

<400> 895

```
gaattcggcc aaagaggcct agggaaattaa tgctaaacta tgccctgct cacttgctct 60
atgaccattc tggtaaatcc ttctatcagt cacttttctg ctataaaaga tttaaaaagt 120
agcaggggtg gctttctgtt cttccatata gacatttcag ccactgacta cctttggtga 180
aaagaaaaaa aaagatccca aaacatgctt tgaaatgaac agtccatcta agtgcttagt 240
ttgacaaata aatagttaga tgccttcttc atacttgata ttttttagtg aaaatataac 300
tggttatgtt acttattaca gttgaaattg ctatttatag attcatgact tattaggatg 360
attgaggtct atgattacag ttttgtttgc atatgtacct caaggaccta caggttatgt 420
aaggtacttg cttgctttga atacctcttt ccacctttac                                         460
```

<210> 896

<211> 319

<212> DNA

<213> Homo sapiens

<400> 896

```
gaattcggcc aaagaggcct agcaatggaa tgggtaatac ataaattaaa tgctgagatt 60
gaagaactga cagcctcagc aagaggaacc ataaggactc caatggcagc agcagcgttt 120
gcagagatgc ggccgctttt tttttttttt ttttttgata agttggtgta aggctatgtg 180
```

acttgatcaa aacagatgca gggcctctaa ataaaagggg tcatctgaaa ttaatgttgt 240
 ttgaaattac tatctgattt tgagggttcc agtatttctg tgaaaaattca acaagaactc 300
 cttggaaact ggtctcgag 319

<210> 897

<211> 601

<212> DNA

<213> Homo sapiens

<400> 897

gaattcggcc aaagaggcct agacacggct ggaggagaag tcccgggtaa aatgtgatca 60
 gtactggcca gcccggtgca ccgagacctg tggccttatt caggtgaccc tgttggacac 120
 agtggagctg gccacataca ctgtgcgcac cttcgcactc cacaagagtg gctccagtga 180
 gaagcgcgag ctgctgcagt ttcagttcat ggcctggcca gaccatggag ttcctgagta 240
 cccaactccc atcctggcct tccctacgacg ggtcaaggcc tgcaaccccc tagacgcagg 300
 gcccattggtg gtgcactgca gcgcgggctg gggccgcacc ggctgcttca tcgtgattga 360
 tgccatgttg gagcggatga agcacgagaa gacggtggac atctatggcc acgtgacctg 420
 catgcgatca cagaggaact acatggtgca gacggaggac cagtacgtgt tcatccatga 480
 ggcgctgctg gaggtcgcca cgtgcggcca cacagagggt cctgcccgca acctgtatgc 540
 ccacatccag aagctgggcc aagtgcctcc aggggagagt gtgaccgcca tggagctcga 600
 g 601

<210> 898

<211> 676

<212> DNA

<213> Homo sapiens

<400> 898

gaattcggcc aaagaggcct agggctggca tacttggttaa tactgatgtc catatagagc 60
 agtaacatta gcgttaatat cagacattaa gttttaacta tatttggaaa tctttaaaca 120
 gttttgatct agtaaaacat aaaaatgca caaaatataa aatgttaggc tctgaatcca 180
 gaagaaaaaa agttctcaaa aacagtacca taaattagat tattctaaca ctatcaacag 240
 attgcaaggc atttggttat ttgggcagca tacctggtct aggaagtagt tgacatgtga 300
 tatggagaga tggggatcac ccaggaactc ttgttccaaa tcaagcagtg cttggcgata 360
 aggctgcaaa acagaatcca gccctgtgca gaaggcccg aggtagattc catgtaaccc 420
 accttggccc tgttgagatg gatggtgatc ctgctgttgc acatggcccg tgtactgttc 480
 aatgaactca gtgaagcgaa tatagtctgt gccgagccgg cagagtcgat tcaggacact 540
 ggtctcactg ggggtggagg aagggaagtc ctgcgatacc tgcaaggccac tccgcttgtt 600
 ccagggtgaaa atggaccag ggtaccgct cagagccaag agcagttcgt ggatcattcc 660
 cacggcggac ctcgag 676

<210> 899

<211> 391

<212> DNA

<213> Homo sapiens

<400> 899

gaattcggcc aaagaggcct aacaggttct gtaagttacc tatttttttg gactttataa 60
 gttatcagca agcttcttgt tagtaaaggc atgataatga aacttgaatt catctacaaa 120
 attggatgtg cccatcaagg ggcctctaaa ccaatttaag cccaaagtta actaattaca 180
 atttctactg gttttagtaa aactagcata gtcaaccaag taaacaaagt ccattgttaa 240
 tcttatttga gttagctaac attacattct agtaatgggt acacctaata atatcatgac 300
 ttgagtttca ttacattcag acataaacta caaattccta atgtgcaaac tactgttgac 360
 atttttctta atcactgatg taccatacca g 391

<210> 900

<211> 597

<212> DNA

<213> Homo sapiens

<400> 900
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 gccttgctaa aacaacagct ggaggaggaa gaagaaaatt tttcaagacc tcaaattgat 120
 gaaaatccat tagatgacaa ttctgaggaa gaaatggaag atgcacacaa acaaaagctt 180
 tctaaaaaac agaagaaaaa gaaacagaaa ccagcacaga attatgatga caatttcaat 240
 gtaaatggac ctggagaagg agtaaaaggtt gatccagaag atactaactt aaatcaagac 300
 agtgccaaag aattggaaga tagtccccag gaaaatgtca gtgtcacaga gatcattaaa 360
 ccattgtgatg atccaaaaag tgaagctaaa agtgttctta aacccaaagg aaagaaaacc 420
 aaagatatga aaaaacctgt cagagtacct gctgaaccac aaacaatgag tgttcttatc 480
 agctgtacaa cctgccatag tgaatttcca tctcggaata aactttttga ccatctaaag 540
 gccacaggtc atgcaagagc accttcatca tcgtctttaa acagcgcaat cctcgag 597

<210> 901
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 901
 gaattcggcc ttcattggcct acgcagggct gagcaggcct gttgccagcc caaccccgtg 60
 cctggctctgt ggggggcaga gcatgagctg gcttagagcc ctgagtgggc accggcttgg 120
 gaggggtgcgg ggagttgact ccttccttaa ctgctctgcy cctggccctt gcctctacag 180
 gagcagggtg tgaggatggc tccgggcccgt tgtggggcct ccccgaccca aaagcttcaa 240
 ggacacgggg atgccagcct cttccccaag atgattttat tgaatgcaca caaagttcat 300
 ccttggggtt gcaaaaagtc ctcgag 326

<210> 902
 <211> 537
 <212> DNA
 <213> Homo sapiens

<400> 902
 gaattcggcc aaagaggcct atgccatagt gctgaaggta gaggtgtctg tgcaaagcta 60
 gtcatttgtt aacagcaatc agaagagatg ggggcaggca cacctgtcag aggtggcagc 120
 agagctggca ggacaggacg gctgggctgg tctggtcagg tgagcatgtc ccagagacag 180
 cagcaacaga gagccgtcca gcaggctgtg aggcagggtg atggctcctag ctcatctctt 240
 ctttgggtct ctaccacata cactgtgtgtt ttaggaggct cctgaggctc accctgccag 300
 ccgtactgtg ggtatccttg gtaggggtac ccttgaggag gtgggtaggg tcccccata 360
 ggtcctggac ccattgggtt tgggtggataa ggtgggtatg gggccgttgg accagggcct 420
 ggatatgggt gagggttctc ttggttcatc ggggacctgt aaagtgcacc tctcctctcc 480
 acgaaccgac tggataacgg tcgggtctga acctgaggag cccggaccag cccgcag 537

<210> 903
 <211> 316
 <212> DNA
 <213> Homo sapiens

<400> 903
 gaattcggcc aaagaggcct agccagaaaa agaccagccc aaaagtgtc aacttcctcc 60
 agaaactttt gcgacaatgt tggcctgtct gcaagcttgt gcagggagtg tttctcagga 120
 gctatcagaa actatcctca ccatggtagc caattgcagt aatgttatga ataaggccag 180
 acaaccacca cctggagtta tgccaaaagg acgtcctcct agtgctagca gcttagatgc 240
 catttctcct gttcagattg accctcttgc tggaatgaca tctcttagta taggtggttc 300
 agctgcccc ctcgag 316

<210> 904
 <211> 687
 <212> DNA
 <213> Homo sapiens

<400> 904


```

gaattcggcc aaagaggcct aggccttgat tctgtcggat ggacttggg ctagctgcgg 60
cggggctgga ggaggccaga taaccatgtc agccacagtt gtagatgcag ttaatgctgc 120
acccttatcg ggtccaaaag aaatgagttt ggaagaacca aagaagatga ccagagagga 180
ctggagaaaag aagaaggagc tagaagaaca gcgaaaattg ggcaatgctc ctgcagaagt 240
tgatgaagaa ggaaaagaca tcaaccccca tattcctcag tataatttctt cagtgccatg 300
gtatatgtat ccttcaaaaa gacctacttt aaaacaccag agaccacaac cagaaaaaca 360
aaagcagttc agctcatctg gagaatggta caagaggggt gtaaaagaga attccgtaat 420
tactaagtac cgcaaaggag catgtgaaaa ttgtggggcc atgacacaca aaaagaaaga 480
ctgctttgag agacctaggc gaggttggagc caaatttaca ggtactaata tagctccaga 540
tgaacatgtc cagcctcaac tgatgtttga ctatgatggg aagagggatc ggtggaatgg 600
ctacaatcca gaagaacaca tgaatttgt tgaagagtat gccaaagttg atttggcaaa 660
acgaacattg aaagcccagt tctcgag 687

```

<210> 905

<211> 557

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (130)

<400> 905

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gaacgtttcn ttccccctcc tctctctgtc ccttcatttc tcattagaat ggaagagggg 180
aagggtgcaga gggaaaatgca gcaggaaaag ccactttgtt ctgggagagc acttggtgta 240
aagggcccagt agagcaggaa gcacaagtct cttaatcttc cagggcctca gttttcatca 300
tccacaaagt ggggtgcagt tgccaagatt ttagtgagtt gagagactgt cccaaagacc 360
acagagcttt ttgggaagct gttgctctaa aaaaatggtc ataatgacaa ttaccaggag 420
gcatcagaca ctctgtgccc actggctaga catgggttat ctctgttcat gtccgaagct 480
ccccgcacc accctccttg cagagttgaa gaggtgctgt gaggagaaaa cctgccaagg 540
gacccagaac gctcgag 557

```

<210> 906

<211> 485

<212> DNA

<213> Homo sapiens

<400> 906

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gaattcggcc aaagaggcct acttgcattc agtatatctc ctgtcgtatt ttctttgttg 60
tacctgtttt tactgtttta ctgtcagttt tcctgggggt ctggggataa gcagatatata 120
acttgtatat tcagttcttc acacttatct gagagttctc aaccattgtg tcttaagcaa 180
ttgataaagg acccaaacc agagatcgaa accaaaagat tcagttaagg ggcagattgt 240
taggggcaat ttgtctttcc tttttaacaa taaatttgaa ctgtgactga aaattggaat 300
ttcctatcag tcttttaaac tatcagtgcc tgattcagag attctggtgt cagtgcacag 360
ggattggcct agaaaatagc aatttttaaa gctttccagg tgataccaat gtgcagccag 420
cccactgcta tatggacttt ggtcctaaaa ttctgcatat acttaaaatg gctactttcc 480
ccgag 485

```

<210> 907

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (119)

<220>

<221> unsure
<222> (151)

<220>
<221> unsure
<222> (155)

<220>
<221> unsure
<222> (269)

<220>
<221> unsure
<222> (281)

<220>
<221> unsure
<222> (409)

<400> 907
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tccctgcgcc tggccaccgc ctctgacccc gccccagtg cctgctctgc cctggcctnc 120
gggtgtgtct tacggggcct tctcgtctga ngacntcttt cctaccatcg cctcgggctg 180
ctcctggacc ctggagaacc ctgacccac caagtactcc ctctacctgc gcttcaaccg 240
ccaggagcag gtgtgcgcac actttgcenc ccccgctgc ngccccctgga ccactacctg 300
gtcaacttta cctgcctgcg gcctagcccc gaggaggcgg tggcccaggc ggagtcagag 360
gtggggcgcc cagaagagga ggaggcagag gcggcagcgg gggtggagnt gtgcagcggc 420
tcaggccctt ttaccttctt gcacttcgac aagaacttcg tgcagctgtg cctgtcggct 480
gagccctccg agggcccgcg cctgctggcg cccgctgccc tagccttccg ctttgtcgag 540
gtcttgctca tcaacaacaa caactcgag 569

<210> 908
<211> 504
<212> DNA
<213> Homo sapiens

<400> 908
gaattcggcc aaagaggcct acactcacta ttatttttca gttctttctt taccagcct 60
ttctccttca tgtgaaaatg ttcattcttc tctcctcctt gaagctctat tctttgtcat 120
atgtaactct ttatgctctg gttcttctct atttctgttt cttttttgtt ttctctatgg 180
gctctttttt tattcattac ctaaagttag gtattcccat ggtttcatcc ttgaccttac 240
tctacaaaca cgatttctat ttccctgatt tcatttttca tctgtatget tatgaccttt 300
ctgtcaagta ttagattcac atatccaat ggcagctact gcttcacctg gatgcctcat 360
agccatttca aatccaccta gtcattcaaa gtagaaaccc acaggtaact atgaaccccc 420
aaacaccacc ttcttaactt catatattta atgaagcacc aagctgtgac tctttctacct 480
cctgaatact actctcccct catg 504

<210> 909
<211> 440
<212> DNA
<213> Homo sapiens

<400> 909
gaattcggcc aaagaggcct acattaatcc ttccctggct gtatctgcct ccttgccaca 60
ggttatcatt attctaaata ttgtgaaagt ttctccatcc ctttaaaacta ttttaccata 120
tgtatgtata tacaccacaca cacacatata tatactgaga accatctatg atttcatttt 180
cttttttata ttgtataaaa cgaaattata ctctctatat atttcaatga catttcttta 240
ctcaatcttg tgatcttgaa atttgctttt gttgatatgt gtggcagtaa tttgttcagt 300
tttcaactct ttactgtttt cattgtataa acacatcata gtttattcat ccttacttct 360
gttggtggaa attttaaatg tttctaggtt tctttttgtt gttcctgcta ttatttatgc 420

accacacaca tacactcgag

440

<210> 910

<211> 374

<212> DNA

<213> Homo sapiens

<400> 910

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gaattcggcc aaagaggcct acaggcattt gctgccaac gtggccttgc agtattaaaa 60
catgtgctaa caccacgaat aaaggcaact cacgttgctt ttgattgcat gaagaattat 120
ttagatgcaa tttatgatgt tacggtggtt tatgaaggga aagacgatgg agggcagcga 180
agagagtcac cgaccatgac ggaatttctc tgcaaaagaat gtccaaaaat tcatattcac 240
attgatcgta tcgacaaaaa agatgtccca gaagaacaag aacatatgag aagatggctg 300
catgaacggt tcgaaaatcaa agataagatg cttatagaat tttatgagtc accagatcca 360
gaaagaagct cgag 374
```

<210> 911

<211> 575

<212> DNA

<213> Homo sapiens

<400> 911

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gaattcggcc aaagaggcct acagacctct tccccacagc ctcggcctct tccacggagc 60
cttctcctgc agggcgagag cgttcctcca gttgtgggtc tgggggtggt ggcattctcc 120
ctaaagggaag tggtcctctc gtggcaagtg atgaagtctc cagctttgcc tcagctctcc 180
cagacagaaa gactgcgtcc ttttcgctcg tggaaaccca ggatcaggag gatttggagc 240
ccgtgaagaa gaaaaatgaga ggagaacaca tccctttctc ctgtagatgg ggaccttgac 300
ctgaacgggc agttgttggc cgcacaaccg cgtagaaatg cccaaaccgt ccacgaggac 360
gtcagagcag cggctgggaa gccagacaag atggaggaga cgtgacatg catcatctgc 420
caggacctgc tgcacgactg cgtgagtttg cagccctgca tgcacacgtt ctgctcggtc 480
tgctactcgg gctggatgga gcgctcgtcc ctgtgtccta cctgcccgtg tcccgtggag 540
cggatctgta aaaaccacat cctcaacaac tcgag 575
```

<210> 912

<211> 632

<212> DNA

<213> Homo sapiens

<400> 912

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gaattcggcc aaagaggcct agacctggtt tgtgaattat ggcctggatt tcacttatac 60
tctctctcct ggtctctcagc tcaggggcca tttcccaggc tgttgtgact caggaatctg 120
cactcaccac atcacctggt gaaacagtca cactcacttg tcgctcaagt actggggctg 180
ttacaactag taactatgcc aactgggtcc aagaaaaacc agatcattta ttcactggtc 240
taatagggtg taccaacaac cgagctccag gtgttctctc cagattctca ggctccctga 300
ttggagacaa ggctgccctc accatcacag gggcacagac tgaggatgag gcaatatatt 360
tctgtgctct atggtacagc aaccatttta ttttcggcag tggaaaccaag gtcactgtcc 420
taggtcagcc caagtccact cccacactca ccatgtttcc accttccccct gaggagctcc 480
aggaaaacaa agccacactc gtgtgtctga tttccaattt ttcccgaagt ggtgtgacag 540
tggcctggaa ggcaaatggt acacctatca cccagggtgt ggacacttca aatcccacca 600
aagaggacaa caagtacatg gccaggctcg ag 632
```

<210> 913

<211> 359

<212> DNA

<213> Homo sapiens

<400> 913

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gaacttttagc cctgtcttct tttttagtgt tcagcactga caatatgaca ttgaacatgc 60
tggtggggct gaagtgggtt ttctttgttg ttttttatca aggtgtgcat tgtgagggtc 120
agcttgttga gtctgggtga ggattgggtc agcctaaagg gtcattgaaa ctctcatgtg 180
```

cagcctctgg attcagcttc aatacctacg ccatgaactg ggtccgccag gctccaggaa 240
 agggtttggga atgggttgct cgcataagaa gtaaaagtaa taattatgca acatattatg 300
 ccgatttcagt gaaagacaga ttcacatctt ccagagatga ttcagaaagc atgctcagag 359

<210> 914
 <211> 501
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (54)

<220>
 <221> unsure
 <222> (70)

<220>
 <221> unsure
 <222> (226)

<400> 914
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 ttgctatgtn ataaaaagaa caacaaatat ttaactctac ttcacgctat gtatgctgac 120
 gtatttgggg gtgaagtgtg ctaatgtctt catctatctt taaaatgcac caaaaaataa 180
 aaaaagatgg acaggtaaatt ttttcttttt tgataaagca aatgtnacac aaaatgttgg 240
 aatctaactg ctactgtgtg tatacgctgc acagtctctt caacatttca tgtttgaaat 300
 ttgtcataat caactgaggg aggaggaaca aacaaaagat gcatctggct atttttgtag 360
 ggaagcttct cttctctgtc caacctccag cgtagaacct taaaaacatc aactatataa 420
 tctactctct catgccaact ccttaaggac acacacttgt ccacactggt tccttatatt 480
 actgaccttg aaccaatttt t 501

<210> 915
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 915
 gaattcggcc aaagaggcct agctctgtta atcctatgga accttttctt tgctccctca 60
 ggacctccag tcctctttca atctttgtcc tactaatgtg gccctgtttg tctttacttc 120
 ctggcttcca tgctggcttg ggttccttat gccctccctc caccaggtt cacctctctc 180
 ttctgtcatc atcactgttt ccattggccac actctagtct tatcaccccc agaaactgtg 240
 cttccccac caggttcca tcacctatcc tcgag 275

<210> 916
 <211> 525
 <212> DNA
 <213> Homo sapiens

<400> 916
 gaattcggcc aaagaggcct aggtgacgc tgcgttttat ttttttcaag gattcagtga 60
 agtcagataa tcgaatatct ctcactctac tggcagacat attcttcacc tgttctgggt 120
 ttagttctcg gataggacct agtgctgcat cttttgcaa agctgttagg tcacttctctg 180
 agtatccatc agtcattcta gcaagttgtg ctatgtcttt ttgggtcaat ggacttcctt 240
 gtttacataa cagattttta agcaaaagta gtcttgtctc ctcatattgt aaagacacat 300
 ataccggttt gatgaaacgc ctgagaacag cctcatcaag ctcttgtggc ctattagttg 360
 caccatttac aagtactctg tcatctccag cagactgtac accatcaaat tctattagaa 420
 attcagtttt taggcgtcta ctacatcgt gctccccttc tcttctttca cacaaaaggc 480
 tatcaacttc atctataaaa attatagaag gttgaagttc tcgag 525

<210> 917
 <211> 707
 <212> DNA
 <213> Homo sapiens

<400> 917
 gaattcggcc aaagaggcct actcatacag ggacagccac catctgggtc aaggaagtct 60
 gggttccctg ctggtgggct ccattctcg atggagtga ccaggcgaga aaggatgacg 120
 atgttcttca tgttgcacct ggacatgccc caggaacaga gacttgccca ggtggcaaca 180
 ctggcacaga tgttgacggc tgcccaactg gtgccacact gagcagggag ccttgtgctg 240
 cacagggtcg ggccctctct ccagtttctt tcctgcaggc atccaaatac cctggaaggg 300
 atttaacccc tgaattccag agggaagaaa gaagaacagt gaagaagtag aactggttct 360
 tgtatgggga gaggaaagtc ttagggacag ctgcaggcgg ggtctcaggc tgctccttgg 420
 caccagctac acagtagtga gctttccag ctttaccgat gaggaagaag ttcaaataga 480
 tagacttcag cattttaatt attttcctat aaatgtattt atgtgtagta tgctagcacc 540
 agccagtaag ctgtgccaca catatgaatg ggaaagcgag gcagttgtgc tcgtgtgagt 600
 ttctgcaggc ttgtgggtaa ttacctgtg tgcacgctg cacgtgcaga atagtcactt 660
 tctgctggtc agtttcttta tccacctatg gtgcccacac actcgag 707

<210> 918
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 918
 gaattcggcc aaagaggcct agaggatagt tagaggctct agccacagaa atacattgtt 60
 gtgttctgct gtataactt aatttcaagg gtttcacaca aacactgaac ttgaacatag 120
 aaaccacttt tgttaagctg tggagttatt tttttaatac aattacttcc caaaacaata 180
 ttttctaagt tagtcatctc ccaagttctt tggcctcaat gtccctattt gtaaaataag 240
 aaaattgaat tcgatcattt ctaaggatct gccaaagaag accaattgca gggatctggg 300
 attgtttagt ttaaatgttc cctgcagtaa atgagtgggt ggccacaagc cgatatcttc 360
 agtaccacca agctgacttt ttgggttctt cctcctctg tccttcctgg gttcttgcaa 420
 gagatgtaga aatacagctt tatcttacta ggaggctaac tttaggaggg catagcttct 480
 gaagatatcc tcaatctctt tgcacttcg 509

<210> 919
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 919
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 tcctggagct gaaggcccct caaatttgaa atccaaaata aataaagtgt cttgtgaatc 120
 tggtcagcca gtgaaatcac aggggaaagg tgaagtggcc agtacaccct ctgacaattt 180
 ggatcctaag ttgactgccc ttgagccaag taagaccaca ggggctccca ttaccctgg 240
 cttcccaaaa gtcacagagg ttcatcatga gcagaaagcc tcaaactctt cagcatctca 300
 gagaagctta cagatgttta aggtgacat gtccaggatt ctgaggctca aaatacagat 360
 gcaggaaaaa ctcgag 376

<210> 920
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 920
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 ggatgagatg tatgggcagc agatagtga aatgaacaa gaattaataa gacaacacat 120
 ggcacagatg gaggaaatta aaacacggca taaggagaa atggagaatg ctttaaggct 180
 atattcaaat attacagtta atgaagatca gataaagtta atgaatgtgg caataaatga 240
 actgaatata aaattgcaag atactaactc tcaaaaggaa aaactcaagg aagaactagg 300

```

actaatTTTA gaagaaaagt gtgctctaca gagacagctt gaagaccttg ttgaagaatt 360
gagctTTTtca agggAACaga ttcagagagc tagacagaca atagctgaac aagaaagtaa 420
acttaatgaa gcacataagt cccttagtac agtggaagat ttgaaagctg agattgtttc 480
tgcatctgaa tccagaaagg aactagaatt aaaacatgaa gctctcgag 529

```

<210> 921

<211> 651

<212> DNA

<213> Homo sapiens

<400> 921

```

gaattcggtc aaagaggcct agaaaatttg aagatggtgt ccacttctca gctccttggg 60
cttttgcttt tctggacttc agcctccaga tgtgacattg tgatgactca gtctccagcc 120
accctgtctg tgactccagg agatagagtc tctctttctt gcagggccag ccagagtatt 180
agcgactact tacactggta tcaacaaaaa tcacatgagt ctccaaggct tctcatcaaa 240
tatgcttccc aatccatctc tgggatcccc tccaggttca gtggcagtggt atcagggtca 300
gatttcactc tcagtatcaa cagtgtggaa cctgaagatg ttggagtgtg ttactgtcaa 360
aatggtcaca gctttccgta cacgttcgga ggggggacca agctggaaat aaaacgggct 420
gatgctgcac caactgtatc catcttccca ccattccagtg agcagttaac atctggagggt 480
gcctcagtcg tgtgcttctt gaacaacttc taccctaaag acatcaatgt caagtggag 540
ttgatgggca gtgaacgaca aaatggcgtc ctgaacagtt ggactgatca ggacagcaaa 600
gacagcacct acagcatgag cagcaccttc acgttgacca aggacctcga g 651

```

<210> 922

<211> 210

<212> DNA

<213> Homo sapiens

<400> 922

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gaattcggcc aaagaggcct aagaaactgt tcaacagtcg ttaggttaga cgtaggaaga 60
ggaagacaaa tgaaaatgca cttttcaacg gtggttatat taacagggtg gatgataatt 120
ggatgcagca caactgatgc tccaccaact acagctacaa ctacagatgc tacagcagtt 180
aaagattcac cggctacaac atcactcgag 210

```

<210> 923

<211> 741

<212> DNA

<213> Homo sapiens

<400> 923

```

gaattcggcc aaagaggcct acttttggtt cagaagaggc tgtatttttt tcagattgta 60
ataaccaatt ttggatattt aaatactgtt tatgaaacat ttagtagaat ttattacttc 120
tggttaactac agctagaata aacattggat aaataaaatt catgaaatat agaaaagtat 180
ctacaggaaa atgaatcatt aatttcccaa tttcagaggt gatcactgtg catttttata 240
aatatttaca cagatatttt tcttacataa ttgaaatcca ttgtaaagt tttatttaat 300
atattgtgaag catttttctt gtcatgaatt attccaacgt aatttttaatg gctacatgag 360
aataccttct ttaacaaatc ttgtattgtt aaatatgtag atttttggaa agtgtttttg 420
attatcaaga aaagctgaca tatttttctt aagtcccatg gaagacttga gtttgaaaga 480
aaatagcaaa ttgtgggttc ttaaacaaaag aaatgtgttc tttagttaat tagctttcag 540
ttaatatctc agtcagtata attcacgaac tgaaatctgt ctgaaacagt ttacacatat 600
tttcaaatct ttaagacata tttttcacia gtgctttgcc atgagttgta ataattacat 660
aataaataac actatctcag aaaaggaaat atgtcatcat cttaagctac attattaaga 720
gattataata taaaactcga g 741

```

<210> 924

<211> 617

<212> DNA

<213> Homo sapiens

<400> 924

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gaattcggcc aaagaggcct acagaatcct aactatttct gaggaactg tccaaaatgt 60
ggctgctttt aacaatggca agtttgatat ctgtactggg gactacacat ggtttgtttg 120
gaaaattaca tcctggaagc cctgaagtga ctatgaacat tagtcagatg attacttatt 180
ggggataccc aaatgaagaa tatgaagttg tgactgaaga tggttatatt cttgaagtca 240
atagaattcc ttatgggaag aaaaattcag ggaatacagg ccagagacct gttgtgtttt 300
tgcagcatgg tttgcttgca tcagccacaa actggatttc caacctgccg aacaacagcc 360
ttgccttcat tctggcagat gctggttatg atgtgtggct gggcaacagc agaggaaaca 420
cctggggccag aagaaacttg tactattcac cagattcagt tgaattctgg gctttcagct 480
ttgatgaaat ggctaaatat gaccttcag ccacaatcga cttcattgta aagaaaactg 540
gacagaagca gctacactat gttggccatt cccagggcac caccattggt tttattgcct 600
tttccaccaa tctcgag 617

```

<210> 925

<211> 238

<212> DNA

<213> Homo sapiens

<400> 925

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gaattcggcc aaagaggcct aattccataa aaatactaaa ttaaaatatt tcaagaagga 60
aagaagggtta atctctgaga aactaataag agataaaaata gcagtcaatg agtagagatg 120
cccgcacatg gatctttgct cacaaaacag tcctgctaag tgaatatagtc atagtaatta 180
caataataag tatgatggta gctaaacatt taatgagtag ctattatagg ccaaactc 238

```

<210> 926

<211> 737

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (61)

<220>

<221> unsure

<222> (117)

<220>

<221> unsure

<222> (124)

<220>

<221> unsure

<222> (151)

<220>

<221> unsure

<222> (178)

<220>

<221> unsure

<222> (201)

<220>

<221> unsure

<222> (211)

<220>

<221> unsure

<222> (352)

```

<400> 926
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nagggatgta ggggtgaggg tggaaaccat ccacaggaga gatgtggaca gacacanagg 120
gatntagggg tgaggggtgga aaccatccac naggagagat gtgtggacag acacagangg 180
atgtaggggt gaggggtgaa nccatccaca ngagagggtgt gtggacagac acagagggat 240
gtaggggtga ggggtggaaac catccacagg agagggtgtgt ggacagacac agaggggatgt 300
aggggtgagg gtggaaacca tccacaggag aggtgtgtgtg acagacacag anggatgtag 360
gggtgaggggt ggaaaccatc cacaggagag atgtgtggac agacacagag ggatgacgag 420
gtgaacagat ggaaaattca gatcaaaagc tgcaaaggag aatacttgat tttgctttct 480
gtagaacttt tataaactta gttgccagat aatgtaaccc atgaaatttg aagtatatac 540
tgctctccaa aatggagttg ctttgttaaa ttaagaaata ctatactgtt tttaaaatga 600
gatatgtaat ggatgggttt atgcttacia aatttgacct gctacaggcg ttttggtttg 660
gtttgggttg gtttgggttg gtttgttttt tccctgaggg gataaaggga gtcaggatca 720
acagtactgg cctcgag

```

```

<210> 927
<211> 829
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (443)

```

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<400> 927
gaattcggcc aaagaggcct aatcagttat cctctcccac tccgtgcctg ggaagtacca 60
acgggtactg aaacgtaatg agtaatgtct agagattttc tccacaggat agaaacaaag 120
ctcaaaggag cagcaagttg aagaaagtgt gacactgttt tatttttagg attttttcct 180
cttttttaaa ataaatatac gtgtagagag acaggggtctc cctttgttgc ccaggctgat 240
ctcgaactcc tgagctcaag ctgtcctccc acctcagcct cccaagggtc gggatcactg 300
gcatgagcct ctgcaccag cccttaggat ttttttttct tttttaaatt ttaattatt 360
ttatatatat ttttaagttc cagggtacat gtgcaggatg tgcaggtttg ttacataggt 420
aaacgtgtgc catggtggtt tgnatcacct gtcacctgt cactaggcat gaggaccagc 480
atgcattagc tcttttccct aatgttctcc atgccccctg gccagccct ctccaacag 540
gccccagtga gtgtgtgtcc cctcccgga ttttttttct taaggaaaca caccacatca 600
ggcgttgaag tgagtgtatt gactgtctga ggtttgtgtg cactttttaa ccagaagtca 660
tggtcgggga cacaagaagca cctccttgcc tatgtagttt tgctccttta ctgctttaa 720
caagcaagat gtggtttgca ttccttctgc tgcgtggtgt gttggctttg tgtttctcaa 780
cagaaataac ttgccttgcc tttgctctca aggttggtga agccccca 829

```

```

<210> 928
<211> 542
<212> DNA
<213> Homo sapiens

```

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<400> 928
gaattcggcc aaagaggcct aagttttagt tccttgattt attgagattc agagcttcat 60
tttatgttgg tcattaggtg aatattactc attttccctc aagagaagct cataagtgtg 120
tgtgggtgtg agagcacgat ggtgcctgtg ttctgtgaat gtgtccatat gtgtctgtaa 180
gagagacaga gaccaagaac ttgccaatt ttagaaatac actaatgtgc agttgttgcc 240
ttttgtctgt attgaaggcc cattgaatga ctaatccagg ctggaagcat tcccatgttg 300
gtgtctgagt ccatgagcca agcctgaggg gacagttagt ctccaggtct gccacactgg 360
tgcaccttgc tggcacgggt cctcaggaag gtggcgactc aggtgggctc tgagttatat 420
tttaactcag ctgctcagtt cccagggcac atttctggat cagaacccat gggaaacagg 480
aggtactaag tgcaatgtct tagcattctg caaaatggag atctgtgtgc cagcagctcg 540
ag

```

```

<210> 929
<211> 693
<212> DNA

```


<213> Homo sapiens

<400> 929

```

gaattcggcc aaagaggcct aaaagaattg ggtataaaa tagatacaac acttctagat 60
tcctataatt acagtggaac agaaaattta aaagataaaa agatctttaa tcagttagaa 120
tcaattgttg attttaacat gtcactgtct ttgactcgac aaagttccaa aatgtttcat 180
gccaaagaca agctacaaca caagagccag ccatgtggat tactaaaaga tgttggctta 240
gtaaaagagg aagtagatgt ggcagtcata actgccgcag aatgtttaaa agaagagggc 300
aagacaagtg ctttgacctg cagccttccg aaaaatgaag atttatgctt aaatgattca 360
aattcaagag atgaaaattt caaattacct gacttttctt ttcaggaaga taagactgtt 420
ataaaacaat ctgcacaaga agactcaaaa agtttagacc ttaaggataa tgatgtaac 480
caagattcct cttcagcttt acatgtttcc agtaaagatg tgccgtcttc attgtctctg 540
cttctcgtct ctgggtctat gtgtggatca ttaattgaaa gtaaagcacg ggggtatttt 600
ttacctcagc atgaacataa agataatata caagatgcag tgactatata tgaagaaata 660
cagaacagtg ttgttctaga tggggaactc gag 693

```

<210> 930

<211> 549

<212> DNA

<213> Homo sapiens

<400> 930

```

gaatcggcca aagaggccta ataaagtttt tcaactacta tggcaatttt cacaaaacca 60
aagcttttat ttatcttctt cttgatcttc tctttggtcc ttgtatctca atgctatgat 120
caaaacccta ggggttacc aagacctcag gagaaactaa gagagtgcga acaacgttgt 180
gagagacaac aaccaggaca acagaaacag ttgtgcaaac aacgttgtga acaacagtat 240
aggaagagc aacaacaaca acatggaggg gagactggtg aagatgatct aggcaatcgt 300
gggcctgata agagctacaa aagattgcaa gaatgccaac gtagggtgcga gagtgaacaa 360
cagggccaac gactacaaga gtgtcaacaa cggtgtcaac aagagtacca aagagagaaa 420
ggacaacacc aaggtgaaac taaccacagc tgggaacaac aagaaaaatc aaacaatcca 480
tactttatcg agtctcagcg attcaggtct cgattcagag ctatgcattg tsatttccga 540
atcctcgag 549

```

<210> 931

<211> 487

<212> DNA

<213> Homo sapiens

<400> 931

```

gaattcggcc aaagaggcct actaagataa ctttgggtatt taattctgtc ttacaggatg 60
ttgttctact atcaaatagt gttacctaaa gatataatga gtgtgctatt ttatcagatt 120
attgatgaaa gtataaaatt aacatcatca gctataacct gcagatcttc ataacatgat 180
ttgattaccc catctgtcac cattaggcaa gaccttaata tatttcataa aaatcagcag 240
cactttaagg ggaaactctg ctgccatgaa ggaaaatata ttaatatattt ctggcttgaa 300
aaattagtgt ttttctgttg tttgtttttt aataaatttg gctttctatg tgattttatg 360
tgtaggtttg ctctatgctg taggaggtta tgatggagca tcacgtcagt gtcttagcac 420
agtagaatgc tataatgcta caacaaatga gtggacctat atagcagaaa tgagcaccag 480
gctcgag 487

```

<210> 932

<211> 169

<212> DNA

<213> Homo sapiens

<400> 932

```

gaattcgcgg ccgcgtcgac cctgcctcga gtgggaaatc atgcaactac tcagaatgtg 60
tcctctcat ctaatgctca tctgtttaat ggtgatgcct cgcgtacagg atctgggtac 120
ctgtgcagtt gtgaatcccc agaggttggg cagatcagtg tctctcgag 169

```

<210> 933

<211> 877
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (68)

<220>
 <221> unsure
 <222> (255)

<220>
 <221> unsure
 <222> (309)

<220>
 <221> unsure
 <222> (320)

<400> 933
 gaattcggcc aaagaggcct acacagataa aattcgagag catggggagc cttttatcca 60
 ggcgtgtntg acttttttaa agagacggtg tccttctatt ttgggcggac ttgccccaga 120
 aaaagaccag cccaaaagtg ctcaacttcc tccagaaact ttggcgacaa tgttggcctg 180
 tctgcaagct tgtgcaggga gtgtttctca ggagctatca gaaactatcc tcaccatggg 240
 agccaattgc agtantgtta tgaataaggc cagacaacca ccacctggag ttatgccaaa 300
 aggacgtcnt cctagtgctn gcagcttaga tgccatttct cctgttcaga ttgacctctc 360
 tgctggaatg acatctctta gtataggtgg ttcagctgcc cctcacaccc agagtatgca 420
 gggttttcct ccaaatttgg gttctgcatt cagtaccctc cagtcaccag caaaagcatt 480
 tccaccctct tcaaccccca atcagaccac tgcattcagt ggtattggag gactttcatc 540
 acagcttcca gtagggtggtc ttggcacagg cagcctgact ggtataggaa ctgggtgctc 600
 tggactccct gcagtgaata acgacccttt tgtacagagg aaactgggca cctctggact 660
 gaatcagcct acattccagc agagtaagat gaaaccttcg gacttgtctc aggtgtggcc 720
 agaggcaaac cagcacttta gtaaagagat agatgatgaa gcaaacagct atttccagcg 780
 aatatataat catccaccac atccaacat gtctgttgat gaggtattag aaatgctgca 840
 gagattttaa gactctacta taatgaggga actcgag 877

<210> 934
 <211> 194
 <212> DNA
 <213> Homo sapiens

<400> 934
 gaattcgcgg ccgcgtcgac gggcagggga ggtgataagg ccttagaact gggaatctag 60
 attcgggcatc tgatcacttg actgagcaaa cttgctcttt ccttttattt aaaacacaaa 120
 acaaaacttc ctgaactaaa gtcacagtac agaatagaat gggatggaca gaaagactca 180
 agagggcgct cgag 194

<210> 935
 <211> 161
 <212> DNA
 <213> Homo sapiens

<400> 935
 gaattcggcc aaagaggcct agggcagaga aaagcagtcg ttagagaaaa atttatagga 60
 ctgactgcat atattaggaa agaagatcta aaatcaatca tctaagcttc catttttagaa 120
 aactagaaga gcaaatgaaa cccaaagtaa gtgttctcga g 161

<210> 936
 <211> 108

<212> DNA
<213> Homo sapiens

<400> 936
atgcgcagcg ggctgaatac atccacttct gcacgtggtg gaaaaaaggg acagtgtcca 60
ctggggccta gtggccagtg gaaccacacc caacactgca ggctcgag 108

<210> 937
<211> 214
<212> DNA
<213> Homo sapiens

<400> 937
gaattcggcg ccgcgtcgac ctcaagcaca gctttcttca caaaagatgg agtctttctc 60
tgctgtgcca cccaccaaag agaaagtgtc cacacaggac cagcccatgg caaacctatg 120
taccatctct tcaactgcaa acagtgtgag tagctctgcc agcaacaccc cgggagctcc 180
agaaactcac ccattcagta gtcccacct cgag 214

<210> 938
<211> 512
<212> DNA
<213> Homo sapiens

<400> 938
gaattcggcc aaagaggcct agttgtccag attggtcttg aactcctggg ctcaagccgt 60
ccacctgcct cagcctccca aagcgttgag attacacaca ggagccacca ctcccagctg 120
ctaatttggt tttatacttt ctttctgtgtc tattaaactc atttttattt aatatgtagg 180
atagagttag tagttatcaa ataagtgga gcttttaccg catcgagatt gttaacttaa 240
cctagtgtgaa cactagaggg acttcaaaact aatcactgaa gtttgagttc agtagtata 300
tcagttagtat atactttggt taaaagtgca gaaccacaca gtttttttcc cccaactctg 360
tggttttcat aagactaagt attatgccta aaattttacc tggttaacta tttgggtta 420
taattctcag gttaatatag catatataaa atgtaacctc tgccaatata tgtatatcaa 480
agcaaaaaac ttttgttcat ggccccctcg ag 512

<210> 939
<211> 160
<212> DNA
<213> Homo sapiens

<400> 939
gaattcggcc aaagaggcct agcagaacta ctatttgaaa agatcacaga ctttgggggt 60
gaattccagc tctgcttctt acttggttga ggactttgga ccctctaagc ctcatcttcc 120
tcataataaa atgagaatag gccgagccc gttgctcgag 160

<210> 940
<211> 121
<212> DNA
<213> Homo sapiens

<400> 940
gaattcggcg ccgcgtcgac cgagcagggg gcctttatat caaaattttc tgaaaccatt 60
cctgcaggac tttatgtgga tccgtatgag ttggcttcat tacgagagag cgttcctcga 120
g 121

<210> 941
<211> 208
<212> DNA
<213> Homo sapiens

<400> 941

gaattcggcc aaagaggcct agagaagctg atcagtaagt ttgacaagct tccagtaaag 60
 atcgtagaca agaatgatcc atttgtggtg gactgctcag ataagcttgg gcgtgtgcag 120
 gagtttgaca gtggcctgct gcaactggcg attggtgggg gggacaccac tgagcatatc 180
 cagaccact tcgagagcaa gactcgag 208

<210> 942

<211> 291

<212> DNA

<213> Homo sapiens

<400> 942

cctaaaccgt caagcgattc tgcctcagcc tcccagtag ctgggattac aggcatgtgc 60
 taccattcct ggctaatttt tgtactttta gtagagacag ggttttgcca tgttggccag 120
 gctggtctcg aacttccgac ctcaagtgat ccaccactt tggcctcca aagtgtggg 180
 atgacgggtg agccactgca cctggccaag agggctgata gtaaattatt gcaagtgaag 240
 aaactaacga tgcaaatgaa aggggtagct atagaagcca agccctcga g 291

<210> 943

<211> 200

<212> DNA

<213> Homo sapiens

<400> 943

gaattcggcg cgcgctcgac ataaaaacca aatacaattt tttttttttg tagaaaaaag 60
 agaaaaaagc agggtaagaa gagaaagtgg tggagctgag ctgggcagag tggctctttt 120
 agaagcgatg acatttacac ataggtcact atggagaggg ccatgcagac acctggagga 180
 gtgccaccaa caggctcgag 200

<210> 944

<211> 895

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (642)

<400> 944

gaattcggcc aaagaggcct aagaaaacca actggaaaaa aaaatgaaat tccttatctt 60
 cgcatttttc ggtggtgttc accttttatc cctgtgctct gggaaagcta tatgcaagaa 120
 tggcatctct aagaggactt ttgaagaaat aaaagaagaa atagccagct gtggagatgt 180
 tgctaaagca atcatcaacc tagctgttta tggtaaagcc cagaacagat cctatgagcg 240
 attggcactt ctggttgata ctgttgacc cagactgagt ggctccaaga acctagaaaa 300
 agccatccaa attatgtacc aaaacctgca gcaagatggg ctggagaaag ttcacctgga 360
 gccagtgaga atacccact gggagagggg agaagaatca gctgtgatgc tggagccaag 420
 aattcataag atagccatcc tgggtcttgg cagcagcatt gggactcctc cagaaggcat 480
 tacagcagaa gttctggttg tgacctcttt cgatgaactg cagagaaggg cctcagaagc 540
 aagaaggaag attgttgttt ataaccaacc ttacatcaac tactcaagga cgggtgcaata 600
 ccgaacgcag gggcggttg aagctgcca ggtgggggg tngcatctc tcattcgatc 660
 cgtggcctcc ttctccatct acagtctca cacaggtatt caggaatacc aggatggcgt 720
 gcccaagatt ccaacagcct gtattacggt ggaagatgca gaaatgatgt caagaatggc 780
 ttctcatggg atcaaaattg tcattcagct aaagatgggg gcaaagacct acccagatac 840
 tgattccttc aacactgtag cagagatcac tgggagcaaa tatccagaac tcgag 895

<210> 945

<211> 296

<212> DNA

<213> Homo sapiens

<400> 945

```

gaattcgcgg ccgcgtcgac tgaattctag acctgcctcg agccatgcag ctgtgctggg 60
tgatcctggg ctccctcctg ttccgaggcc acaactccca gccacaatg acccagacct 120
ctagctctca gggaggcctt ggcggtctaa gtctgaccac agagccagtt tcttccaacc 180
caggatacat cccttctca gaggctaaca ggccaagcca tctgtccagc actgggtaccc 240
caggcgcagg tgtccccagc agtggaagag acggaggcac aagcagagat ctcgag 296

```

<210> 946

<211> 481

<212> DNA

<213> Homo sapiens

<400> 946

```

gaattcggcc aaagaggcct agtcttttagg gagttccctt gatctcttga aagagacaca 60
gccccattta cattatttctg tggatttcac cagcatagta tagttttttt ctgtaagtcc 120
ctcattctta tgtaataaca ggtggaactg aggtttgaag aacctcagtg gcccatcctg 180
atgacattgg agactcaaag agacaagaga gagtaggggt taaaacctga gctttaagac 240
tcccactagc ttcgtgtcct ttggcatggt aacgtgcctc agtttctca tctgtataat 300
ggggatatac gaaaggcacc agtcctaagg tgaacattaa gtgagatgat tctagttaca 360
gacttagaac aatttcagc acatagttaa atatccagga aattctggta ctgttatgtg 420
tgggtgagct gacctggatg tagatgtttt cctctctctt gctgacctt cgcctctga 480
g 481

```

<210> 947

<211> 292

<212> DNA

<213> Homo sapiens

<400> 947

```

gaattcggcc ttcattggcct aggagaggaa cataactgaa acgtttatag taaggattta 60
agagccaaga gggtcagaca cacacacaca cccatacaca cagcacaga atgagaaatg 120
gagaggcata ttttgacatt ctccattca tctctctgcc tattcattca ttcaaaaatg 180
cttattgata gcctactcga tgagacgcac tgttctagcc actggggctc cagcagtgaa 240
caggatgagc aaggctcctg tttctctaaa gcttacgctc attccactcg ag 292

```

<210> 948

<211> 690

<212> DNA

<213> Homo sapiens

<400> 948

```

gaaagaaaat acctaaagg atcaataatg gtgtcttctg gttgcagaat gcgaagtctg 60
tgggttatca ttgtaatcag ctctttacca aatacagaag gtttcagcag agcagcttta 120
ccatttgggc tggtagggcg agaattatcc tgtgaagggt attctataga tctgcgatgc 180
ccgggcagtg atgtcatcat gattgagagc gctaactatg gtcggacgga tgacaagatt 240
tgtgatgctg acccatttca gatggagaat acagactgct acctccccga tgccttcaaa 300
attatgactc aaagggtgca caatcgaaca cagtgtatag tagttactgg gtcagatgtg 360
tttctgtatc catgtcctgg aacatacaaa taccttgaag tccaatatga atgtgtccct 420
tacatttttg tgtgtcctgg gacctgaaa gcaattgtgg actcaccatg tatatatgaa 480
gctgaacaaa aggcgggtgc ttggtgcaag gacctcttc aggctgcaga taaaatttat 540
ttcatgccct ggactcccta tcgtaccgat accttaatag aatatgcttc tttagaagat 600
ttccaaaata gtcgcaaac aacaacatat aaacttccaa atcgagtaga tggtagtgga 660
tttgtggtgt atgatgatgc tatactcgag 690

```

<210> 949

<211> 337

<212> DNA

<213> Homo sapiens

<400> 949

```

gaattcggcc aaagaggcct aagtaccct gacgacactg aaaggcttgt tgagatggaa 60

```

```

caagtcctct cttcacttaa caagatgaga aagacaatag gtggtgtggc tctctggcga 120
cagcaaatct ggcgaattgc aagggttcgc ttgttaaagt taaagcatga aagaaaagct 180
cttttagcac tgctattaat tctaattgct ggattttgcc ctcttcttgt ggagtatacc 240
atggtgaaaa tatatcaaaa cagttacacc tgggaacttt ctctcattt gtatttcctt 300
gctcctggac aacaaccaca tgacctccc actcgag 337

```

<210> 950

<211> 334

<212> DNA

<213> Homo sapiens

<400> 950

```

gaattcggcc ttcattggcct acggaatgaa gactacaagg agatcaccca gaaactctgc 60
ttccaatgg ggagaaatgt tttttctcat gattatgtat tttggtgtgg cgatttcaac 120
taccgcattg atcttactta tgaagaagtc ttctattttg ttaaacgcca agactggaag 180
aaacttctgg aatttgatca actacagcta cagaaatcaa gtggaaaaat ttttaaggac 240
tttcacgaag gagccattaa ctttggaccc acctacaagt atgacgttgg ctcagccgcc 300
tacgatacaa gcgacaaatg ccgcaccct cgag 334

```

<210> 951

<211> 140

<212> DNA

<213> Homo sapiens

<400> 951

```

gaattcggcc aaagaggcct acagccttga tattcagggt ggattgtaaa atataaattt 60
ttgtgagatt tcaaagatta agattatttt gataacatta ttacagatt taaaagatgt 120
ggttatcacg cgctctcgag 140

```

<210> 952

<211> 180

<212> DNA

<213> Homo sapiens

<400> 952

```

gaattcgcgg ccgcgtcgac aaagtaaacc cagatgaatt tgctgtggca cttgacgaaa 60
ctcttgagga ctttgcgttc ccagacgaat ttgtctttga tgtttgggga gtcattggtg 120
atgccaaaacg aagaggatta tgatgtgtac actccatctc tgaagaaaca acccctcgag 180

```

<210> 953

<211> 528

<212> DNA

<213> Homo sapiens

<400> 953

```

gaattcggcc aaagaggcct agaaagagag ataactggat ttaagaacct cttaaaaatg 60
acaagaaaga agttaaatga atatgaaat ggagaattta gtttccatgg agatttaaaa 120
actagtcaat ttgaaatgga tattcagatt aataagctaa aacataaggt tgaagaagaa 180
aggaaaaaac acagaaataa tgaaatggaa gtatcagcaa acatacatga tgggtgctact 240
gatgatgctg aagatgatga tgatgatgat ggattaattc aaaaaagaaa gagtggagaa 300
actgatcatc agcaatttcc caggaaggaa aataaagagt atgctagtag tggctcctgcc 360
ttgcaaatga aggaagttaa gagcactgaa aaagaaaaac ggacctcgaa agaattctgtg 420
aattcaccag tgtttgggaa ggccagttaa ctaactggtg gcctgctaca agtggatgat 480
gacagcagtt taagtgaat agatgaggat gaaggaaggc tcctcgag 528

```

<210> 954

<211> 132

<212> DNA

<213> Homo sapiens

<400> 954
 gaattcggcc aaagaggcct attagaatat aattaacatt ttgttgtaaa cattttaatc 60
 tgaacaaaac cctttttatt tggagactct ctgtgagaaa caatgctcca cgtttcctgg 120
 ctgtgtctcg ag 132

<210> 955
 <211> 756
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (135)

<220>
 <221> unsure
 <222> (188)

<400> 955
 gaattcggcc aaagaggcct aactttacag ggacaaatca tagaacagtc aggtacaatg 60
 actggtgggtg gaagcaaaagt aatgaaagga agaattgggtt cctcacttgt tattgaaatc 120
 tctgaagaag aggtnaacaa aatggaatca cagttgcaaa acgactctaa aaaagcaatg 180
 caaatccnag aacagaaagt acaacttgaa gaaagagtag ttaagttacg gcatagtga 240
 cgagaaatga ggaacacact agaaaaattt actgcaagca tccagcgttt aatagagcaa 300
 gaatatattga atgtccaagt taaggaactt gaagctaattg tacttgctac agccccctgac 360
 aaaaaaaagc agaaattgct agaagaaaac gttagtgtct tcaaaacaga atatgatgct 420
 gtggctgaga aagctggtaa agtagaagct gaggttaaacc gcttacacaa taccatcgta 480
 gaaatcaata atcataaact caaggcccaa caagacaaac ttgataaaat aaataagcaa 540
 ttagatgaat gtgcttctgc tattactaaa gcccaagtag caatcaagac tgctgacaga 600
 aaccttcaaa aggcacaaga ctctgtcttg cgtacagaga aagaaataaa agatactgag 660
 aaagagggtg atgacctaac agcagagctg aaaagtcttg aggacaaagc agcagagggtc 720
 gtaaagaata caaatgcccg cgaggttctc cctata 756

<210> 956
 <211> 656
 <212> DNA
 <213> Homo sapiens

<400> 956
 gaattcggcc aaagaggcct aaaatgttaa aaaatcaagc aacttctgct acttctgaaa 60
 aggataatga tgatgaccaa agtgacaagg gtacttatac cattgagtta gagaatccca 120
 acagtgagga agtggaagca agaaaaatga ttgacaaggt gtttgagta gatgacaatc 180
 aggattataa taggcctgtt atcagacgaa aacataaaga tctaataaaa gattgggctc 240
 tcagttctgc tgcagcagta atggaagaaa gaaaaccact gactacatct ggatttcacc 300
 actcagagga aggcacatct tcatctggaa gcaaacgttg ggtttcacag tgggctagtt 360
 tggctgccaa tcatacaagg catgatcaag aagaaaggat aatggaattt tctgcacctc 420
 ttcctttaga gaatgagaca gagatcagtg agtctggcat gacagtgaga agtactggct 480
 ctgcaacttc cttggctagc cagggagaga gaaggagacg aactcttccc cagcttccaa 540
 atgaagaaaa gtctcttgag agccacagag caaaggttgt aacacagagg tcagagatag 600
 gagaaaaaca agacacagaa cttcaggaga aagaaacacc tacacagata ctcgag 656

<210> 957
 <211> 716
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (54)

<400> 957
gaattcggcc aaagaggcct aaggtgagag taatgactaa ctccaaagat tgnctggaa 60
aaaaaagaga agaccccaaa ccaggcccta aaaaaccaa agagaaagt gatgctctat 120
cacagtttga tctcaacaat tatgcaagt ttgttataat tgatgatcat cctgaagtaa 180
cagtaattga agatccccag tcaaatttga atgatgatgg ttttactgaa gtggtatcca 240
aaaaacaaca aaaacgttta caggatgaag aacgccgaaa gaaggaagaa caagtcatac 300
aggtctggaa caaaaagaat gcaaatgaaa aaggaagaag ccagacttct aagcttcctc 360
caagatttgc caaaaaacag gctacaggga tccagcaagc acagtcttca gcctcagttc 420
cacctctagc ttcggctcca cttccacct caacctcagc ttcagttcca gcctcaacct 480
cagctccact tccagcaacc ttaactccag ttcagcctc aacctcagct ccggttccag 540
cctcaacttt agctccagtt ctggcctcaa cctcagctcc agttccagcc tcacccttag 600
ctccagtttc agctcagcc tcagtctcag cttcagttcc agcctctact tcagctgcag 660
ctataacctc ttcttcagct ccagcctcag cccagctcc aacccccaca ctcgag 716

<210> 958
<211> 432
<212> DNA
<213> Homo sapiens

<400> 958
gaattcggcc aaagaggcct acaaaccacc atttttaaca tgcaagcggg agttccatta 60
gccagtgtta ttgtgaaaga atctctgaca gaagaagatg tgtaaaactg tcaaaaaaca 120
atatacaact tagttgatat ggaaagaaaa aatgatcctc tacctatttc cacagttggg 180
acaagaggaa agggccctaa aagagatgaa caataccgta tcatgtggaa tgaattagaa 240
acccttgtca gagcccatat caacaactca gagaaacatc aaagagtctt ggaatgtctg 300
atggcatgca ggagcaaacc ccagaaagag gaagaacgaa agaaacgagg aagaaagagg 360
gaagacaaaag aggacaagtc agagaaagca gtgaaagatt atgaacagga aaagtcttgg 420
caagatctcg ag 432

<210> 959
<211> 481
<212> DNA
<213> Homo sapiens

<400> 959
gaattcggcc aaagaggcct atgatttttc agacctgctc cttagtaata atactagcta 60
gtcagcattc acgcctacca ggacacaaaa atcctcttca aaactactca gaaaagaaag 120
tcattactca ggaatgatgt ccattcagga gaaatcaaaa gagaattcct ccaaagttac 180
taaaaaaagt gacgataaga attcagaaac agaaattcag gattctcaaa agaattctagc 240
aaaaaatca ggtccaaagg agactataaa atcacaggct aaatcttcca gtgaaagtaa 300
aataaatcag ccagaattgg aaacacgcat gagtacaagg tcatcaaagg cagcatctaa 360
tgataaagct actaaatcca ttaataaaaa tacggtgact gtgaggggat attcacaaga 420
atctacaaaa aagaaattat ctcagaaaaa attagtagat gaaaacccta aagcactcga 480
g 481

<210> 960
<211> 123
<212> DNA
<213> Homo sapiens

<400> 960
gaattcggcc aaagaggcct actgtgggtt ttggtaaggt gtctgtggag attctctggc 60
taccctagaa aaaaagaaat attcatgcta ccattagttt tcctttgtaa ggttaatctc 120
gag 123

<210> 961
<211> 324
<212> DNA
<213> Homo sapiens

<400> 961
 gaattcggcc aaagaggcct acgagtcttg tgtggatcaa acattatgtt atttgggtgtg 60
 actagcagga cgccactgac tgtgcccttg ccaatggtga tatatttgca attaatttta 120
 agaaatttct cagtaaaggc ttcttcttct tcagaagttg aagacacaac tctcgaggc 180
 cgaataccgc tcacagtcca tgccgggggt gcttcttttg gatgggctac atctggagtc 240
 gtggttttat caaattcagc ctcggatgac gttggcgaca gagggttac agggctgagg 300
 gatggggaac tctcaaccct cgag 324

<210> 962
 <211> 517
 <212> DNA
 <213> Homo sapiens

<400> 962
 gtggaaagaa aagtttgaac aagctgaaaa aagaaaactt caagaaacaa aagagttaca 60
 gaaagcagga attatgtttc aaatggacaa tcatttacca aaccttgta atctgaatga 120
 agatccacaa ctatctgaga tgctgctata tatgataaaa gaaggaacaa ctacagttgg 180
 aaagtataaa ccaaattcaa gccatgatat tcagttatct ggggtgctga ttgctgatga 240
 tcattgtact atcaaaaatt ttggtgggac agtgagtatt atcccagttg ggaagcaaa 300
 gacatatgta aatggaaaac atattttgga aatcacagta ttacgtcatg gtgatcgagt 360
 gattcttggg ggagatcatt attttagatt taatcatcca gtagaagtcc agaaaggaaa 420
 aaggccatct ggaagagata ctctataag tgagggtcca aaagactttg aatttgcaaa 480
 aatgagttg ctcatggcac agagatcaca actcgag 517

<210> 963
 <211> 163
 <212> DNA
 <213> Homo sapiens

<400> 963
 gaattcggcc aaagaggcct acagtttggg agcttatcct tttttatata agttatattt 60
 ttcaaatatt agtatttgaa tgagtccaga tatatacttt gccatcctg tctgcttcat 120
 atttttttta gcagacctca tttttagaag tgaaaacctc gag 163

<210> 964
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 964
 gaattcggcc aaagaggcct actttccaaa tccggttgtc tattttctgc cctccacttg 60
 cttgaagtct cagccgcctt caactcaatt aacaattctc cccataagtc acttttcttt 120
 ggctttccag atgcatagaa gtctcctctg ccagatcctt ctctctttgt ctgacctcga 180
 g 181

<210> 965
 <211> 138
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (56)

<220>
 <221> unsure
 <222> (104)

<400> 965
 gaattcggcc aaagaggcct agtggagatg gataatagaa aaattctctg tatctngatt 60

gcagtggtga ttgcacaggc acacactctc acacgctctc tcangatagg aggcctctct 120
ccaccctcag ctctcgag 138

<210> 966
<211> 134
<212> DNA
<213> Homo sapiens

<400> 966
gaattcggcc aaagaggcct aagagattag gtgattagtg acaatcagtt gtaacttagc 60
actgtaggc tgcaaacccc ttgctccttc ctttccacca aactatgttg attttctctc 120
cttacctctc cgag 134

<210> 967
<211> 205
<212> DNA
<213> Homo sapiens

<400> 967
gaattcggcc aaagaggcct aggttggtgg aagtttgggt tgtttctact ctttggtcat 60
tatgaacat tgtgtacaat tgtttatgtg gacatatgtt ttcatttctc tcagaaataa 120
tggaattgct gcccctgttt tcagtcttca aaaaatggag aaagtgaatt gccacctaaa 180
ctttggtatc accggtcccc tcgag 205

<210> 968
<211> 190
<212> DNA
<213> Homo sapiens

<400> 968
gaattcggcc aaagaggcct aagataaatt aacagaacat ttgtctattg tctcttattt 60
atatattcat tcattcattt cagtgggctg atggataggg gtataatcca atactatgtt 120
atttattttg ttgctcaaat cattccagct atggccactg gaagctcttt cagttgctcc 180
ccatctcgag 190

<210> 969
<211> 209
<212> DNA
<213> Homo sapiens

<400> 969
gaattcggcc aaagaggcct agttgcttct tgtttgtttt tctttcaatg gtcaggcccc 60
tcttctgtag ggctgtgtg gtttgctggg cattcacttc aggcactatt catctggctc 120
gtcctgtgct ctggagccag tcactcaagg aggtgggaaa acagcaaaga tgggtgcttc 180
ctccttcttc tgggaactct gacctcgag 209

<210> 970
<211> 562
<212> DNA
<213> Homo sapiens

<400> 970
gaattcggcc aaagaggcct actcacttct gccccgggca ctgcgtccag cagcagaggg 60
gacagggggc aggtgtgtga ctgggttctt ggttaccag gcctgaccag agggagcggg 120
agggcagagg tgaggagggg gaagatgttt ctgggcctac caaggttcaa caagagaacg 180
gagctgggaa tgtgactgct ggagcctgag aggtggagga gttctgatcc cccgttactt 240
cctagcattt tctcctcttg ccttaaaagt tcctgtatg tgaaacggga agtcctgaga 300
gtgtgtgttg gtggctgtgc gcacgcacac aagacgggag tcaccctgtg cttcctgccc 360
aagatactga cccattgaac ccccaaagca tctttctctc cacaaagtcc gtggtgcctt 420
cctgggtgggc tgcagacact aatggtgttg gggggtcttg gaacagcttc tctatgtgtg 480

gattcgtgta aatgcgaaga gttcacatat aaagaagtga ctttgattct gtgattatat 540
tgatttgta cacagtctcg ag 562

<210> 971
<211> 171
<212> DNA
<213> Homo sapiens

<400> 971
gaccgtcgat tgaattctag acctgcctcg aacccagtt ttttttaat ttccgatacc 60
agtaatccct acagaacctc aatgggcatg cagtgtcca tagtttactc ctgttttctc 120
attctgctac taccactcca cccatcaagt gtttctgta atgaactcga g 171

<210> 972
<211> 119
<212> DNA
<213> Homo sapiens

<400> 972
gaattcggcc aaagaggcct agttttatac cactctttga tcagaagtac ttagaactaa 60
aagtcaactt atcaagctta aagccatagg gttacactat gaaatttaac atactcgag 119

<210> 973
<211> 221
<212> DNA
<213> Homo sapiens

<400> 973
gaattcggcc aaagagagca gaattgttga atcctatgat aattttgtgc ttaatttatt 60
attatttttt ttctatccca ctctgttgcc cagcctggag tacagtggta caatctcgyc 120
ttcctgcage ctctgtcccc cggggttcaa gtgactctcg tgcttcagcc tcccgagtag 180
ctgggactac agacacccgc caccacgccc ggctgctcga g 221

<210> 974
<211> 188
<212> DNA
<213> Homo sapiens

<400> 974
gaattcggcc aaagaggcct aggtcctcgt ttcttttgtc tcatttcatg tcttccatta 60
tagtggtttt aatagtctta ctcccagtc tcttattggc ccacattcaa accatttact 120
taagtagctt tagtgtgtct gagcctgtgt tatctcagcc tgctctgttc acatcagtct 180
ttctcgag 188

<210> 975
<211> 257
<212> DNA
<213> Homo sapiens

<400> 975
gaattcggcc aaagaggcct aaccgtcgat tgaattctag aactgtcctc catcctccga 60
acaagtagag agagcttcac ttccaagaat tccaagtttt cttgttaatg ctgtatggtt 120
acttcgggct aaagagaact ctgcttctta aaatcctctt gatttcttct tctgggagcc 180
tcgatggccc caggaagcca gcggtcccg tcccgagcc ttgccccaca accagccacc 240
acccgccaac actcgag 257

<210> 976
<211> 201
<212> DNA
<213> Homo sapiens

<400> 976
gaattcggcc aaagaggcct aaggagcgtg gaagctcaca aatgtgtaga gactgggtag 60
agagcaagaa tctataaaact gactccatcc aacagaaaatt acaaagtga agctgcagta 120
ctaagcaaag tggctcacag agtaggggaa gcaagacacc attcctactt aacgatgaaa 180
ccaactcagc tggctactga g 201

<210> 977
<211> 139
<212> DNA
<213> Homo sapiens

<400> 977
gaattcggcc aaagaggcct agtttttaag gtgaataatg ctcataaaat ttttacagct 60
gtgtcttatg aaattctgtt tcctttttttt ggttgcttat atgtattcta taaagacact 120
gaaaggatgc aacctcgag 139

<210> 978
<211> 192
<212> DNA
<213> Homo sapiens

<400> 978
gaattcggcc aaagagtaag tacactgtaa ggtagaaga ggtcttgctc tcagagaata 60
attaagacta gaaggcgaca ggacaagctt tggggaaaac cattgatggt tgtttttttg 120
tttgtttgtt tgtttgtttt ggtttttttt gagatgaagt cttgctttgt tgcccgggct 180
gaagtactcg ag 192

<210> 979
<211> 240
<212> DNA
<213> Homo sapiens

<400> 979
gaattcggcc aaagaggcct acgtataacg ttgtaacaat tggtaagata ccaatttaca 60
aatatggaaa tatatattag attcatttgg aggaggttgt atatggtata cgattggcat 120
atgtttttca tcttgaaagt atcagttatt ttccctgttat tatctgtggt aacattgctt 180
gttttttttg ttgtttgtga gacagagtct cgctctgtct ctgtcgccca ggcgctcgag 240

<210> 980
<211> 564
<212> DNA
<213> Homo sapiens

<400> 980
gaattcggcc aaagaggcct aaagatatctt gaggaagag cttcctgggt agaagaaatc 60
atacctgcag aagctataag ggtaaccac ttgagagtgg ataaaagttt catggaacaa 120
gaccttccaa gattttttata agatgtgtag ttgtgaatat ataaaagttg ttacaaattc 180
ccaggtcaaa agaaattatg aattataaga ggtatacaga acagaagcag catttgatg 240
ccggataata ttattgtatt ttccttcatt ttctcctgct tagttttctga tgaagaacaa 300
tcagtagtat acgttccagg aatttctgct gaaggaaatg tcagatcaag acacaagctg 360
atgagtccaa aagctgatgt taaacttaag acttccaggg tgactgatgc ttcaatctcc 420
atggagtcct taaaaggcac aggagattca gtagatgaac agaattcctg caggggagaa 480
ataaagagtg catcattgaa ggatttatgt cttgaagaca aaagacgcat tgcaaaactta 540
attaaagaac tggccggact cgag 564

<210> 981
<211> 191
<212> DNA
<213> Homo sapiens

<400> 981

```

gaattcggcc aaagaggcct acctgttctc ccaaaagacg aatgttttct tttttccgaa 60
tttgcccttc aatgtctctg ataactccgt caggaagcct ctgctgggcc cactgctgct 120
tcacatgtac gccggccact gtggccgccc tcagcagcac cgagaggccc agcaccacct 180
tcgagctcga g                                     191

```

<210> 982

<211> 170

<212> DNA

<213> Homo sapiens

<400> 982

```

gaattcggcc aaagaggcct atgagtattt ttctcatgta ttcttggtac tacattttac 60
ttggagccag gatcttgctc tgttgcccag gctggctgga ctgcagtggc ctgaacacag 120
ctcaccacag catcaactat ttgcaactaa gtaatccccc catcctcgag 170

```

<210> 983

<211> 744

<212> DNA

<213> Homo sapiens

<400> 983

```

gaattcggcc aaagaggcct atttagaaat ggaaaaatgt taacaaatgt ggcaattatt 60
ttggatctat caccctgcat cataactggc ttctgcttgt catccactcc taccaccagga 120
cctacaccac ggtccactct tgggtccagt gaagcatttg cttctacttc tgcacctttc 180
actagcctcc ccttttccac cagctcttct gctgcttcta ccagcaacc aaattctgct 240
tcattgtcat cagtttttgc agggctccct ttgcccttac caccaacatc ccaaggccta 300
tccaaccgca ctctgttaat tgctgggtggc tctactccca gcgttgccgg tccacttggt 360
gtgaacagtc ctcttttgtc tgcgttaaaa ggttttctga catccaatga caccaattta 420
atcaactcct ctgctttatc ctctgctgtc acaagtgggc tggcttccact atcttctctt 480
actcttcaga actctgactc ttctgcttca gcccttaaca agtgcctatgc cccatcagcc 540
atccctaccc cacagaggac ttccactcca ggggtggccc tgttccagg cctgcccgtct 600
cccgtggcta actcaacttc cactcccctg acattgacctg tacagtctcc tttagccact 660
gctgcacag cttccacgtc agtgccagtt agctgtggct cctcagcctc ccttttgcgt 720
ggccccacc caggtacact cgag                                     744

```

<210> 984

<211> 666

<212> DNA

<213> Homo sapiens

<400> 984

```

gaattcggcc aaagaggcct atgggaaaat aatgatcaac tcatgtttac ataaacaagc 60
tgactgcagc aatgaggagg ccctgggggc cctgggcact gcttatgttg ccaacattcc 120
acccccagca agagctctaa gcagagcccg gtgccgacct ttctcttcaa ggtcctgacg 180
ttgacatact ccctgctcct tctatagtc gaacaacgtg tccctaggag ctaatatctc 240
aggagggcct tattgtgccc ctaaggcaat tatttttttc tccctttttt tgtcatagtt 300
attagaactt ttccaaaaat aaaaccttga atgtaaacat ttatagaatt aatttacata 360
tgtggaaaaa aaatccagag ctgcttggat gaaagtatgg gtgggtgtgt ggccaggcct 420
atgcctgtc tccttacaca cacaccacc ctagagccct acataaactc tgagatgtct 480
ccagagtaca gttggaaaac tcagctccag ggccgtataa ggaatttgca ttctctataa 540
ttttttttta attgagatat aattgaaata gagtaaaaat ttaccctttt taacatccag 600
ttcaacacat aattgtgtat catcataaac aagatgtaca acagtttgat ccgcaccctc 660
ctcgag                                     666

```

<210> 985

<211> 517

<212> DNA

<213> Homo sapiens

<400> 985

```

gaattcggcc aaagaggcct aggaagggga catgctgacg ctgttcgacg gggacgggtcc 60
cagcgcgccga gtcttggccc agctgcgggg acctcagccg cgccgcgcgc ttctctcctc 120
tgggcccgcac ctcacactgc agtttcaggc accgcccggg cccccaatc caggcctggg 180
ccagggtctc gtattgcact tcaaagaggt cccgaggaac gacacgtgcc ccgagctgcc 240
acctccggag tggggctgga gaacggcatc ccacggggac ctgatccggg gcacgggtgct 300
cacctaccag tgcgagcctg gctacgagct gctaggctcc gacattctca cttgccagt 360
ggacctgtct tggagcgccg cgccgcgcgc ctgcaaaaag atcatgactt gtgctgaccc 420
tggcgagatt gccaacgggc accgcaccgc ctcggacgcc ggcttccccg ttggctccca 480
cgtccagtac cgctgcctgc cagggtacag cctcgag 517

```

<210> 986

<211> 627

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (161)

<400> 986

```

gaattcggcc aaagaggcct aggagcagat gagagccctc ctgctgggac agagaattgg 60
gttctagtgg actctgtgct acacttaaac ctgtgagaca aaccgcccac tattttatta 120
tttaattatg caatgcctag ttctaaatg gattggaggc naattaccgt aaattttgaa 180
acagcctata tgcagaaat gataatgttg ccacctaaat gttttctgtc cccccaccc 240
tccccagggg aaatggtagg aaaatggtaa gtttcttagg gcaaagactg tgtcttctgt 300
ttcttttcat gcttaggata tggttctgtg catagtaggt actcagtaaa tgttcctaga 360
atcataaaat cctcaacaga tatgttactg agcatctgct tttcatgata agcactctat 420
cagatccttg ggatgcaaag gtaaataaga caaatccctt ttgcccagag agctcaccat 480
caagttgggg gagggaaaag ggaattcaaa acatgttaat aaatcatcat agtactgtga 540
gataagtgcg attaagaagc tagttataaa gtatagggga aatagaggag taatcatgtc 600
tgaaaagtca ggaaagtcgt cctcgag 627

```

<210> 987

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (11)

<220>

<221> unsure

<222> (13)

<220>

<221> unsure

<222> (66)

<400> 987

```

gaattcggcc nangaggcct agagacagca gagcacacaa gcttctagga caagagccag 60
gaaganacca ccggaaggaa ccatctcact gtgtgtaaac atgacttcca agctggccgt 120
ggctctcttg gcagccttcc tgatttctgc agctctgtgt gaaggtgcag ttttgccaag 180
gagtgtctaa gaacttagat gtcagtgcac aaagacatac tccaaacctt tccaccccaa 240
atttatcaaa gaactgagag tgattgagag tggaccacac tgcgccaaca cagaaattat 300
tgtaaagctt tctgatggaa gagagctctg tctggacccc aaggaaaact ggggtgcagag 360
ggttgtggag ccgctcgag 379

```

<210> 988

<211> 339

<212> DNA

<213> Homo sapiens

<400> 988

```

gaattcggcc aaagaggcct aagcacacaa gcttctagga caagagccag gaagaaacca 60
ccggaaggaa ccatctcact gtgtgtaaac atgacttcca agctggccgt ggctctcttg 120
gcagccttcc tgatttctgc agctctgtgt gaagggtgcag ttttgccaag gagtgtctaa 180
gaacttagat gtcagtgcac aaagacatac tccaaacctt tccaccccaa atttatcaaa 240
gaactgagag tgattgagag tggaccacac tgcgccaaca cagaaattat tgtaaagctt 300
tctgatggaa gagagctctg tctggacccc aagctcgag 339

```

<210> 989

<211> 396

<212> DNA

<213> Homo sapiens

<400> 989

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gaattcggcc aaagaggcct aatgaaaaat taaaattgag cttttttatt agaaagacaa 60
cagtacataa tttacccctt gctaaaggta ttcaataaaa aagtggagat atttttattc 120
ccaggtaatt gtcacataca gtctttcttc tctacttctg cttcattctc tttgtgtcac 180
tttagtatgt gtacctctg ggtgctctct gtacattttt tctcctctat acaagtctgt 240
gccatggctt ctgctgtcat ttcttctgct ttgctcttca ccaggatttc gctgtgcccg 300
tttctctgtc tccctttgct tgtaactacc aggacttctg ctccggcttc tccggctcct 360
ttcctccctg ccgtggcttc tgctgctccc ctcgag 396

```

<210> 990

<211> 316

<212> DNA

<213> Homo sapiens

<400> 990

```

gaattcggcc aaagaggcct aagccgtatt tgacaagtat aggtggctct atattataga 60
aatgggaata acattatttt tatttttatt ttttttgaag acagtgtctt gctctgtctc 120
ccaggctaga gtgcagtggg gcagtcttgg ctcactgcaa cctccgcctc ctgggttcga 180
gcaattctcc tgcctcagcc tcctgagtag ctgggattac aggcacgcat caccacaccc 240
ggccagtttt tgtattttta gtagaaatgg ggtttcacca tgttggctag gatgggtctca 300
atctcctgac ctcgag 316

```

<210> 991

<211> 388

<212> DNA

<213> Homo sapiens

<400> 991

```

gaattcggcc aaagaggcct aggataatag tcaaattctt acctcgctct ttcactgcta 60
gtaagatcag attgcgtttc ttccagttac tcttcaatcg ccagtttctt gatctgcttc 120
taaaagaaga agtagagaag ataaatcctg tcttcaatac ctggaaggaa aaacaaaata 180
acctcaactc cgttttgaaa aaaacattcc aagaacttcc atcagagatt ttacttagat 240
gatttacaca atgaagaaaag tacatgcact ttgggcttct gtatgcctgc tgcttaatct 300
tgcccttgcc cctcttaatg ctgattctga ggaagatgaa gaacacacaa ttatcacaga 360
tacggagttg ccaccactaa aactcgag 388

```

<210> 992

<211> 361

<212> DNA

<213> Homo sapiens

<400> 992

```

gaattcggcc aaagaggcct agagacagca gagcacacaa gcttctagga caagagccag 60

```

```

gaagaaacca ccggaaggaa ccatctcact gtgtgtaaac atgacttcca agctggccgt 120
ggctctcttg gcagccttcc tgatttctgc agctctgtgt gaaggtt: ag ttttgccaag 180
gagtgtctaaa gaacttagat gtcagtgcac aaagacatac tccaaac: t tccaccccaa 240
atttatcaaa gaactgagag tgattgagag tggaccacac tgcgcca: a cagaaattat 300
tgtaaagctt tctgatggaa gagagctctg tctggacccc aaggaaaact gggttctcga 360
g 361

```

```

<210> 993
<211> 378
<212> DNA
<213> Homo sapiens

```

```

<400> 993
gaattcggcc aaagaggcct agagactaac ccagaaacat ccaattctca aactgaagct 60
cgactctctg cctccagcat gaaagtctct gccgcccttc tgtgcctgct gtcataagca 120
gccacettca ttccccaagg gctcgtctcag ccagatgcaa tcaatgcccc agtcacctgc 180
tgctataact tcaccaatag gaagatctca gtgcagaggc tcgcgagcta tagaagaatc 240
accagcagca agtgtcccaa agaagctgtg atcttcaaga ccattgtggc caaggagatc 300
tgtgtcgacc ccaagcagaa gtgggttcag gattccatgg accacctgga caagcaaacc 360
caaactccgg tactcgag 378

```

```

<210> 994
<211> 367
<212> DNA
<213> Homo sapiens

```

```

<400> 994
gaattcggcc aaagaggcct attgaattct agacctgcct cgagccctcc cgtattaata 60
tttccacttt tggaaactact ggccttttct ttttaaagga attcaagcag gatacgtttt 120
tctgttgggc attgactaga ttgtttgcaa aagtttcgca tcaaaaacaa caacaacaaa 180
aaaccaaaaa actctccttg atctatactt tgagaattgt tgatttcttt tttttattct 240
gacttttaaa aacaactttt tttttccact tttttaaaaa atgcactact gtgtgctgag 300
cgctttttctg atcctgcacg tggtcacggg cgcgctcagc ctgtctacct gcagcacaca 360
tctcgag 367

```

```

<210> 995
<211> 133
<212> DNA
<213> Homo sapiens

```

```

<400> 995
gaattcggcc aaagaggcct aggtgggtggt tgtggctgtg gttgtagaaa taataatggt 60
ggtgggtggt cggctgctgc tgctgctgct gaggggtgatg gtgcggatgg tgggtggctgt 120
gccggtgctc gag 133

```

```

<210> 996
<211> 414
<212> DNA
<213> Homo sapiens

```

```

<400> 996
gaattcggcc aaagaggcct agtctctttt tttcccccac tcattgctcc aagaattttt 60
ttcttcttac tcgccaaggt cagggttccc tctgcccgtc ccgtattaat atttccactt 120
ttggaactac tggccctttc tttttaagga aattcaagca ggatacgttt ttctgttggg 180
cattgactag attgttttga aaagtcttcgc atcaaaaaaca acaacaacaa aaaaccaaac 240
aactctcctt gatctatact ttgagaattg ttgatttctt ttttttatc tgacttttaa 300
aaacaacttt tttttccact tttttaaaaa atgcactact gtgtgctgag cgctttttctg 360
atcctgcacg tggtcacggg cgcgctcagc ctgtctacct gcagcacact cgag 414

```

```

<210> 997

```


<211> 394
 <212> DNA
 <213> Homo sapiens

<400> 997
 gaattcggcc aaagaggcct acgagaagtc ctgtaagacg taaatatttt taaaattcac 60
 tgaatttttg tctttctcgg taccatagaa caccacagcc aagagatctc gatcactgct 120
 tatgatctta ctgatgtaca cactttggat acactggatg ctcatgtcaa aagggtgtcaa 180
 ctcatcttca tctccatcct cttcctcacc atcaccttct tcttctcct cctcttctc 240
 ccacacctct tctcttctt cgtctacctc attgtcagcc tctgtctccc cattttctc 300
 attagcatte ccggttagcag gggcgctctt tccattttct gcctcttcca caacttctt 360
 cttctccttt aagtccttgg tggtagagtct cgag 394

<210> 998
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 998
 gaattcggcc aaagaggcct acgagaagtc ctgtaagacg taaatatttt taaaattcac 60
 tgaatttttg tctttctcgg taccatagaa caccacagcc aagagatctc gatcactgct 120
 tatgatctta ctgatgtaca cactttggat acactggatg ctcatgtcaa aagggtgtcaa 180
 ctcatcttca tctccatcct cttcctcacc atcaccttct tcttctcct cctcttctc 240
 ccacacctct tctcttctt cgtctacctc attgtcagcc tctgtctccc cattttctc 300
 attagcatte ccggttagcag gggcgctctt tccattttct gcctcttcca caacttctt 360
 cttctccttt aagtccttgg tggtagagtct cgag 394

<210> 999
 <211> 118
 <212> DNA
 <213> Homo sapiens

<400> 999
 gaattcgcgg ccgcgtcgac ccattggatct gttcagtcgt gcgtttgtgc ttatgtctcc 60
 agcagtcgag ggggcagccc agggcgccct ctacaggctc cttcccgccc ctctcgag 118

<210> 1000
 <211> 110
 <212> DNA
 <213> Homo sapiens

<400> 1000
 gaattcggcc aaagaggcct agttttatct gttagctcct ttaatcccca caaaagccat 60
 cagaagtagt tgctattatt aatcctgttt tacagatgag gatcctcgag 110

<210> 1001
 <211> 494
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (143)

<220>
 <221> unsure
 <222> (287)

<400> 1001
 gaattcggcc aaagaggcct aaccaggaaa tggagcggct ccgggagctg cagcgggct 60

```

ccatccctaga catgcgacaga gaccacgagg agcagctgca gcggtctaaag ctgctgaagg 120
accgagaggt cgatgcggcc acnagtgcga cctcccacac gcggtccctg aatagcatca 180
tccaccagat ggagaagttc tccagcagcc tgcacgagtt gtccctccgc gtggaggcct 240
cgcacctcac cacctcccag gagcgggagc tggggatccg gcagcngac gagcagctgc 300
gggactgca ggagcggctg ggccagcagc agcgggacat ggaggaggag cggagccggc 360
aacaggaggt catcggaag atggaggcac ggctgaatga gcagagccgg ctgctggagc 420
aggaacgctg gcgggtgact gccgagcagt ccaaggcgga gtccatgcag cgcgccctag 480
tggagcgtct cgag 494

```

<210> 1002

<211> 370

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (8)

<400> 1002

```

gatcaacnag atgaagggtt atactctgct gtcggagggc attgatgaga tgggtgggcat 60
catctacaag cccaaaacta aagagactcg ggagacctat gaggtgctac tcagcttcat 120
ccaggctgct cttggggacc agccacgtga tatcctttgt ggggcagctg atgaagttct 180
agctgttcta aagaatgaaa agctgcggga caaggaaagg cgaaaggaga ttgacctgct 240
gctgggtcaa acagatgata ccagatacca tgtgctagtg aacctgggca aaaagatcac 300
agactatggt ggagataagg aaatccaaaa tatggatgac aacattgatg agacatacgg 360
tggctctcgag 370

```

<210> 1003

<211> 568

<212> DNA

<213> Homo sapiens

<400> 1003

```

gaattcggcc aaagaggcct aggtttcgggt tggaggactc gttggggagg tggcctgcgc 60
ttgtagagac tgcattcccc agacgatggc ggaggagat aatcgcagca ccaacctgct 120
ggctgcagag actgcaagtc tggaaagaca gctgcaagga tggggagaag tgatgctgat 180
ggctgataaa gtcctccgat gggaaagagc ctggtttcca cctgccatca tgggtgtggt 240
ttctttgggtg tttctgatta tctactatct agatccatct gttctgtccg gcgtttcctg 300
ttttgttatg tttttgtgct tggctgacta ccttggtccc attctagcgc ctagaatttt 360
tggctccaat aaatggacca ctgaacaaca gcaaagattc catgaaattt gcagcaatct 420
agtaaaaact cgacgcagag ctgtgggttg gtggaacgc ctcttcacac taaaggaaaga 480
aaaacctaag atgtacttca tgaccatgat cgtttccctt gctgcgggtg cttgggtggg 540
acaacaagtc cacaaccaac ttctcgag 568

```

<210> 1004

<211> 551

<212> DNA

<213> Homo sapiens

<400> 1004

```

gaattcggcc aaagaggcct aaactattca gattacttaa ccccaatgac aaaatccaca 60
aaaattttga aggcagagaa acagaaggaa tccagtgatg ttttagctcc attagtctaa 120
taggtcagat attaaaaaat tgttcataatc aaaattacct tatatggatt attgccatgt 180
tttttgagag ttaattattt actgttttct aattcttgcc agtatattatg aacagctgta 240
gcttgatatt tacctactga attttaggag aactaatggt cacagtttgg gttcttttat 300
gtgtatgttt ttaaaacagc tattttgtga atctagggtg ttggttttta gaagatttca 360
ggagatgcag tccagcacia ttagagctgg aacattgtta cagcaggctt tttgttgctc 420
atgggcagat agagggaag aatcagttgt tagcccaaaa tttccacatt tcagtgttgt 480
aaactctgaa tgtgataggt agatgtgggc taagaataat ttcctccagt gaagacacgg 540
gagaactcga g 551

```

<210> 1005

<211> 662

<212> DNA

<213> Homo sapiens

<400> 1005

```

gaattcgcg cgcgctcgac gtggataaat cagtgcctgc ttctttacca gcaatgacaa 60
aagagatgac agagaatcag aggcctctgcc ctcatgaaca agaggatgct gactgcagtt 120
cagaatccgt gaaatttgac gcacgttcaa tgacagcatc ccttcctcac agcactaaaa 180
atggcccttc ccttcaggag aagttgaagt ccttcaaggc tgccctcatt gctctctacc 240
tccttggtgt tgcagtacta atacctgttg ttggaatagt aacagtccag gaacatggga 300
attcactgga tgcaatctcc aagtccttgc agagtctgaa tatgacactg cttgatgttc 360
aactccatac agaaacactg aatgtcagag tccgtgaatc tacagcaaag caacaggagg 420
acatcagtaa attggaggaa cgtgtgtaca aagtatcagc agaagtccag tctgtgaaag 480
aagaacaagc gcacgtggaa caggaaagta aacaggaggt gagagtattg aacaacatca 540
ccaacgacct cagactgaag gactgggaac actcacagac actgaaaaac atcaccttca 600
ttcaaggggc tcctggaccc caaggtgaaa agggagacag agggcttact ggactactcg 660
ag 662

```

<210> 1006

<211> 166

<212> DNA

<213> Homo sapiens

<400> 1006

```

gaattcggcc aaagaggcct aagtttgtgt cagaatcatg ttactttttg gtatcttcct 60
taccttaatg gttctgaatt acagcctggc ttccagggaa gtaaagaaag tgattgttta 120
tgggggaaaa ggagcactgg gcacagagag tgtgcgcata ctcgag 166

```

<210> 1007

<211> 236

<212> DNA

<213> Homo sapiens

<400> 1007

```

gaattcgcg cgcgctcgac gaggagggca aggagaggag gcaggagcag gccaacctgc 60
agctgcactt gcagcctagg ggcaatagag cagagtggtc agaggctggg ctgggaccaa 120
ccacagggtc cagtcacac cctgtcatca ttcgctgggc gagctcaggc ctgtcactga 180
atcgctttgt gcctcagttt cctccctaaa atgagaataa tagcatcgta ctcgag 236

```

<210> 1008

<211> 147

<212> DNA

<213> Homo sapiens

<400> 1008

```

gaattcgcg cgcgctcgac ttcaaggcag ttatcttgat ttgggggga tttaatatat 60
taaagctata taatactcag atttgggcac tgtaatgact atatctgtgc tgtaattac 120
atgtatttaa aacgtcacat actcgag 147

```

<210> 1009

<211> 699

<212> DNA

<213> Homo sapiens

<400> 1009

```

gaattcgcg cgcgctcgac cgattgaatt ctaggcctgc ctacgcctcc caaagtctg 60
ggattacagg cgtgagtcac cgtgccaggc ccttatgtag tggcatttct aacacaaaag 120
atztatttt acctaaaatg acaatactta ctgggttgcc aaggagaata gttaagttgt 180
agctaaagat gaaaagccca gagtaggcaa gtaagaaaac cgaattggta aaacttctt 240

```

```

ctccacagga cttctgtag tgattgttc atgaactttg aaaggagcaa tggcagttcc 300
tccccgatct ccgttctact caccacatcc caataccgta aagtttatga gcagaggaat 360
ttaacataat gcattttaag ttcataaact aacaaaataa cttcagatct tttaaaaatg 420
cttttttagaa gtttggcctg catttctacc tttttcacca tattctgtct cctcagctac 480
ctcctaactc cctgaactta aaactctctg gggtcgcttt ccattaatag cttttgactt 540
tgtttcttat gctttggaaa tgtatgccat agcgacattg ctattttaag aggcttttat 600
atattcacgt tttctccctc ttttctctct gtcttccctt gcccttccct ctattccctt 660
tcttattctt gccacccccc aacacccccc acactcgag 699

```

<210> 1010

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1010

```

gaattcgcgg ccgcgtcgac gagaccgtgg tagagaagac agtggtagac cagaaataac 60
ccaaaggatt gccccttctg tagaaggccc ttagactcca tgatgccttt cagctgggtg 120
ctatacttgc acctaaactc gggggcttca ctttctatcc ctacaattac tcaaacagat 180
aaaaggctac tcgag 195

```

<210> 1011

<211> 162

<212> DNA

<213> Homo sapiens

<400> 1011

```

gaattcgcgg ccgcgtcgac ttcgtccctt tgcttccctc ctgtgatcca gctacagttg 60
tgctcatggg gcctttctgt gaagtagtgc ttgtgggtga tattatggtt ttgaacagct 120
cagctgaaga agttattgtc acagctgtga tacgcactcg ag 162

```

<210> 1012

<211> 478

<212> DNA

<213> Homo sapiens

<400> 1012

```

gaattcggcc aaagaggcct aatttttcac cgcttattct ttttgtcttt ttaacaaaca 60
tattatccga attttttttt ctgcaagcca ctgatagtct ctgctaacta gcttaattga 120
cctttttaca aagtttgatc cccaagcatc ctcaactaaa tcattgaata cttcaatcag 180
gatattatct gctttacttt acaaaataaaa ccaaatcttt tgtcaacagg atgaaaccca 240
tcttaaagga aagaaaagga attggtgtga agagagaagt tagagaaggg aaatgcagtg 300
aattactatc tgtgtccatc aggaagtttg tcctgttaac caaatgggta ctgcactacc 360
agggttactg gtttattttc cagggagctg ataaagcagg agaactgttg ctgcatgttt 420
tctatttgga ctccgtcaca atatggtagg atatccctca ccaactcccg aactcgag 478

```

<210> 1013

<211> 528

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (172)

<220>

<221> unsure

<222> (177)

<400> 1013

```

gaattcggcc aaagaggcct acaagagata gccccagccc agattttcaa atcattaatg 60
gtagataact acaccaaaaga tggagtccca ggtcaagaaa gaccaagggt tccctctgct 120

```

```

gttgtgccct ctacaagcac aggaggagtt gctctaccta ttacaacagc cntaganaca 180
gttaacattc atggagatca ctctcttaag aataaagctg agcttgctga tcccatgaaa 240
aatgaagcag ggatcgatga agggcatgtg ataggagaat ctgagtcagt gcacagtggg 300
gcgtctaaagc attcagtaga gaaagtcaca gagctagcaa aagggtcacct ccttcttgga 360
gtgccagtag aagaccagag cctaccagga gaggccagag ccctagaagg atatgcagat 420
agaggtaatt tcccagcaca tccagtgaat gaagagaaag agactaaaga aggggtctgtt 480
gcagttcaga ttcttgactt actggaagac aaagcacaac agctcgag 528

```

<210> 1014

<211> 478

<212> DNA

<213> Homo sapiens

<400> 1014

```

gaattcgccc aaagaggcct aggaactaca cagaatggag gtggagtccc taaacaaaat 60
gcttgaggag ctaagacttg aacggaagaa actaattgag gattatgaag gcaagttgaa 120
taaagctcag tccttttatg aacgtgagct tgatactttg aaaaggtcac agctttttac 180
agcagaaaagc ctacaggcca gcaaagaaaa ggaagctgat cttagaaaag aatttcaggg 240
acaagaagca attttacgaa aaactatagg aaaattaaag acagagttac agatggtaca 300
ggatgaagct ggaagtcttc ttgacaaaatg ccaaaagctt cagacggcac ttgccatagc 360
agagaacaat gtccaggttc ttcaaaaaca gcttgatgat gccaaaggag gagaaatggc 420
cctattaagc aagcacaaag aagtggaaag tgagctagca gctgccagag agctcgag 478

```

<210> 1015

<211> 515

<212> DNA

<213> Homo sapiens

<400> 1015

```

gaattcgccc aaagaggcct attataaatg acccggtaa gttggtttca aagtccgaca 60
ggcrtgtctg tttactagct gcgtggcctt ggacgggtgg ctgacatctg taaagaatcc 120
tcctgtgatg aaactgagga atcgggtggc cgggcaagct ggggaagagca aagccagagc 180
tgcgtgcct caatacccac aaaagaccat tcccagtata cataagcaca ggatgttttt 240
ctcaagaggg atgtatttat cacttggaca tctgtttata atataaacag acatgtgact 300
gggaacatct tgctgccaaa agaatcctag gcagtggctc attgtatgtg aggttgaacc 360
acgtgaaatt gccaatatta ggctggcttt tatctacaaa gaaggagttt catgggggtc 420
agcctaacag ttatggaaac tacagtcctt ataaaccatt ggcattggtta taaacagatc 480
tcaagtataa aaattttgta attgggcccgc tcgag 515

```

<210> 1016

<211> 156

<212> DNA

<213> Homo sapiens

<400> 1016

```

gaattcgccc aaagaggcct agggacggag agacagagaa ataaaaaatt aaacgtggca 60
aaaatcaaca aagttccaat gcagcaagca tatggcaaaag cagaggaatt cacagagaaa 120
cagagagaga aactggatag gctgggggaga ctcgag 156

```

<210> 1017

<211> 173

<212> DNA

<213> Homo sapiens

<400> 1017

```

gaattcgccc aaagaggcct agggaaaattt ttcttctccc acattatatt tattcagtga 60
tttatttatg tcagtataga ctcatggata tttattttat accttgggta ataaccaac 120
accactttat ttgttgctc aaattgttcc aactttgccc acaagaactc gag 173

```

<210> 1018

<211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1018
 gaattcggcc aaagaggcct aaagagtata tacctgctga cactgtactt ctctcatcaa 60
 gtgagcccca agccatgtgc tacattgaaa catccaactt agatgggtgaa acaaacttga 120
 aaattagaca gggcttacca gcaacatcag atatcaaaga cgttgacagt ttgatgagga 180
 tttctggcag aattgagtgt gaaagtccaa acagacatct ctacgatttt gttggaaaca 240
 taaggccttga tggacatggc accgttccac tgggagcaga tcagattctt cttcgaggag 300
 ctacgttgag aaatacacag tgggttcacg gaatagttgt ctacactgga catgacacca 360
 agctgatgca gaattcaaca agtccaccac ttaagctctc aaatgtggaa cggattacaa 420
 atgtacaaat tttgatttta ttttgtatct taattgccat gtctcttgtc tgttctgtgg 480
 gctcagccat ggaactcgag 500

<210> 1019
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 1019
 gaattcggcc aaagaggcct aaaaaataat ggaaataaag ctcatataag gtcctaagg 60
 tcttgggttt agcattgctg gaggtgttgg aaatcagcat attcctgggg ataatagcat 120
 ctatgtaacc aaaataattg aaggaggtgc agcacataag gatggcaaac ttcagattgg 180
 agataaactt ttagcagtga ataacgtatg tttagaagaa gttactcatg aagaagcagt 240
 aactgcctta aagaacacat ctgattttgt ttatttgaaa gtggcaaac ccacaagtat 300
 gtatatgaat gatggctatg caccacctga tatcaccac tcttcttctc agcctgttga 360
 taacctgtt agcccatctt ccttcttggg ccagacacca gcctctccag ccagatactc 420
 cccagtttct aaagcagtag ttggagatga tgaaattaca agggaaggac tcgag 475

<210> 1020
 <211> 246
 <212> DNA
 <213> Homo sapiens

<400> 1020
 gaattcggcc aaagaggcct agccattcac gtatctttgc agaaatatcc attcaaatct 60
 cttgtctcatt tttcagctgg gttacttccc tttctattgt tgaaacttag gaattctttg 120
 gacactagac tcacacagata tatgatttgc aaatatcttc tcttattctg tgggtgtct 180
 ttttactttc ttgataatgt tccggtcagg ccgaattttt tcccgatccc agagaagggtg 240
 tcaaag 246

<210> 1021
 <211> 147
 <212> DNA
 <213> Homo sapiens

<400> 1021
 gaattcgcgg ccgcgtcgac aatgttgctg aagttgagtc atcaaagaat gcttcagagg 60
 acaatcattc tgagaatact ttgtattcaa atgataatgg aagtaattta cagcgtgaag 120
 caactgtcat cagtgaactt cctcgag 147

<210> 1022
 <211> 217
 <212> DNA
 <213> Homo sapiens

<400> 1022
 gaattcgcgg ccgcgtcgac gcactatata atcaaaaatt actcatccta caaagagcaa 60
 ggggaagcta aataattccc aagggaagaa acaattaaca aacaccatcc ctgagaattg 120

ttgcaaattg ccagatctta aagcagctgc taaaactatg ccctgcaaag taaaggtgaa 180
cactttttaa acaaatatga tgggtgcacat cctcgag 217

<210> 1023
<211> 236
<212> DNA
<213> Homo sapiens

<400> 1023
gaattcgcgg ccgcgtcgac attgaattct agacctgcct cgagtgactc cgtcggagga 60
aaatgactcc ccagtcgctg ctgcagacga cactgttctt gctgagtctg ctcttctctg 120
tccaagggtgc ccacggcagg ggccacaggg aagactttcg cttctgcagc cagcgggaacc 180
agacacacag gagcagcctc cactacaaac ccacaccaga cctgcacctc ctcgag 236

<210> 1024
<211> 173
<212> DNA
<213> Homo sapiens

<400> 1024
gaattcgcgg ccgcgtcgac ttgagacaaa aggtgggttaa gtagcattat tatgtaatgc 60
ttatatacca tagagttttt aatagaagag aaatccattt cctccgaggg tcactattaa 120
caatgtactt ccttaaattt agtttaatga ttgtaatggg tgctactctc gag 173

<210> 1025
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1025
gaattcgcgg ccgcgtcgac cacaggaatg aattacacgc cctccatgca tcaagaagca 60
caggaggaga cagttatgaa gctcaaaggc atagatgcaa atgaaccaac agaaggaggt 120
attcttttga aaagcagtga aaaaaagcta caagaaacac caactgaagc aaatcacgta 180
caaagactga gacaaatgct ggcttgcctt ccacatgggt tactggacag ggtcataaca 240
aatgttacca tcattgttct tctgtgggct gtagtttggg caattactgg cagtgaatgt 300
cttcctggag gaaacctatt tgggaattata atcctattct attgtgccat cattggtggt 360
aaacttttgg ggcttattaa gttacctaca ttgcctccac tgccttctct tcttggcatg 420
ctgcttgtag ggctcgag 438

<210> 1026
<211> 736
<212> DNA
<213> Homo sapiens

<400> 1026
gaattcggcc aaagaggcct aattgaattc tagacctgcc tcgagtatgg aaatagagtt 60
gagggaaatg agaacagaag ccattgccag acctctggaa ataaacgaga ctgaaaaagt 120
gatgagaatt gcaataaaaag agattttgac acaggttcag aagactaaaag acctgctcaa 180
taatgtggcc tctgatgaag ctaattttaga agccaaaatc gaaaagagaa aattagaact 240
ggaaagaaat cggaaagcgac tagagactct gcagagtgtc aggccatggt ttatggatga 300
gtatgagaag actgagggaag aattacaaaa gcagtatgac acttatcttg agaaatttca 360
aaatctgact tatctggaac aacagcttga agaccatcat aggatggagc aagaaagggt 420
tgagggaagct aaaaacactc tctgcctgat acagacaag ctcaaggagg aagagaagcg 480
cctgtctcaag agtgggaagta acgatgactc ggacatagac atccaggagg acgatgaatc 540
cgacagttag ttggaagaaa ggcggtgcc caagccacag acagccatgg agatgctcat 600
gcaaggaaga cctggcaaac gcattgtggg cacgatgcaa ggtggagact ccgatgacaa 660
tgaggactcg gaggagagtg aaattgacat ggaagatgat gatgacgagg atgacgattt 720
ggaagacgag ctcgag 736

<210> 1027

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1027

```

gaattcggcc aaagaggcct acgtagatca gtctcctttt gtgcctgaag agacgatgga 60
ggaacagaag acaaaagtgg gtgatggtga cctctctgct gaggagatac ctgaaaatga 120
ggtatccttg agaagagctg tcagtaaaaa gaagacagca ctgggcaaaa accattccag 180
aaaagatgga ctcagtgtg aaagagggaag agatgactgt ggaacctttg aggacacagg 240
gcccccttctc cagtttgact ataaggctgt tgctgatcga ctccctggaaa tgaccagcag 300
gaagaacacg ccccaacttca acaggaagcg cctctccaaa ctcatcaaga aattccaaga 360
cctttctgaa ggaagcagta tatctcaact cagttttgcg gaggacattt ctgctgatga 420
agatgaccaa atcctcagtc aaggaaagca taagaagaaa ggaaataaac ttttagagaa 480
aactaacttg gaaaaggaaa aactcgag

```

508

<210> 1028

<211> 632

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (166)

<400> 1028

```

gaattcggcc aaagaggcct acaaaaggca gtttaattga tttcagtga gacagactca 60
agaaagaaat gcaaaatcct acttccttga aaatttctga agaggaaaca aaactcaggt 120
ctgttagtcc aactgagaag aaagataatt tggaaaacag atcatntacc ttggcagaaa 180
agaaggtgct ggcagaaaaa caaaactctg tggccccatt agagcttaga gatagtaatg 240
aaatagggaa gacacaaatt acacttggtat ctatagctac tgaactgaaa gaatcaaaag 300
ccgatgctat gccacagcac ttctatcaaa atgaagacta caatgaaaga cccaaaatca 360
ttgttggttc tgaaaaggag aaaggtgaag aaaaagaaaa tcaggtatat gtgctttcag 420
aaggaaagaa gcagcaggaa catcagcctt attctgtgaa tgtagccgag tctatgagta 480
gagaatcaga tatctcttta ggtcattctt tgggtgaaac tcaatcattt tcattagtta 540
aagctacatc agttactgaa aaatcagaag ccatgctcgc agaggctcac ccagaaatca 600
gagaagcaaa ggcagtagga acccaactcg ag

```

632

<210> 1029

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1029

```

gaattcggcg ccgcgtcgac gttttatatt gtgttttcca ctagtatatc cctgttgatt 60
tgtttgtgcc ttttattaac tgccattttc taaaattttt ttcaataaaa ggaaggaaga 120
tgacgctcga g

```

131

<210> 1030

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1030

```

gaattcggcc aaagaggcct aagcagacat ctgagaaagc ttcagcattt ctcttgctaa 60
cagattcaga aaagtgtctc aaagcagagc acagagttat ttggtgtttg ctgaagacag 120
cctttgtgcc acaatcactt attaaataag cgatcaattt cccattgaac tgaacatgca 180
acatttatca tacattcagt tctcattcac actccttaag atttggtcag aatttttatt 240
tctgttcag tctctactt ttctactcct gtatgaataa aatattgatt tgattacagt 300
ggctttgact ataatgtggg agccaatttt tgccctcagtc ttcattttta tatttacctt 360
gttattctca ggcatttttt tcttctatgt gagagttaaa atcattctgt aatttcccc 420

```



```

caaaatcaca ttgggtattct agttggcaat gctttacatt tatgttaagt ttgaggggaat 480
tggtagtcca agtataaggt aattaaggcc attttatctc taagtgaaca gacttgaaac 540
tccagagcta ctgaagtaaa agttagaatc atttgcattt tcattcagat aggagataat 600
tttgtaaatc ttgatgctat tattttaact ctattagctt aagtaatgtc ataatagaaa 660
acacaagcat ttgaccaaat gagatccatt cagcgactaa ctggcaaggc accgctcgag 720

```

<210> 1031

<211> 1077

<212> DNA

<213> Homo sapiens

<400> 1031

```

gaattcggcc aaagaggcct atgaggtagc ttatttcgtc aattaattag ggtgctggat 60
ggtagagaat tttgtcagtc aactatgtac acacagtaaa tactgtttct taggcaaagg 120
taactttttt atatagttgt aaaattccat tatattccat tgccaaagaa acattaagaa 180
ctttgtatag ctgtataaaa agcaactaat tttttaaaga ataaacattt taaagtcagc 240
aaacatactg tgtccttgca gaagttagtg tgctgagcag cagccttatg ggtgggtctt 300
tttttcttag ttttccaggc ttaacatttt tgattttgtt ttttaatgtt tggaacataa 360
atgaagattt gatcacattat ttcattatct aaaaaggatt aattattcat gctcatttga 420
agaacttcat tttgtagcaa atggcatatc acaggatctg tccagataat cgatattttc 480
agtatacaaa tgtataaat cagagatgag aatgtactta gctgtatttt caaataagta 540
accttcccc cttttgtagg actttaaaac taggcatcaa tgaacctgtt tttcctatta 600
tgcttggaat ttagtcatga taccttgact cattccatca tatttcaaga ggattcagag 660
tgctagaaat tatttttgta gctgtgaaca caccgcaaca ctggctcttg ggcctatgat 720
gacccacaga tgactcagta tagagtccat tgctaattat aaattactag tgaatctttt 780
tgarattttt agctctagtg ggaaaaatct ggccactttt gtgtttttat gaaggccatg 840
gaataaaaagg atccaaagat ttaaatattt ttatctaata ttttgattgt tttcttaact 900
ttctccttaa aacattcagt agtgataaag atatagaaac tgcaactgtg gagaattgga 960
atatttaagg ctggttgaca ttttttattt tcattttata tcttttgrat agctctacaa 1020
ggcagtgttt tgtaatttgg tttcattatg aagatccagt acttggcagc tctcgag 1077

```

<210> 1032

<211> 802

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (770)

<400> 1032

```

gaattcggcc aaagaggcct agacagagtg aagaaactgt gttccccctt tgggttgcta 60
tcgatcaagg gtaaaattcc attctgatat caaatgcag tattcgacc actgtgagca 120
ccttttagag agactgaaca aacagcgga agcaggtttt ctctgtgact gtaccatagt 180
gattggggaa ttccagttta aagctcatag gaatgtgctg gctccttta gtgagaattt 240
tggtgcgac tacagaagca cttctgagaa caatgtcttt ctgtatcaga gtcaggtgaa 300
ggctgatgga tttcagaaac tgttgagtt tatatacaca ggaacttta atcttgacag 360
ttggaatggt aaagaaattc atcaggctgc tgactatctc aaagtggag aggtgggtcac 420
taaagcaaaa ataaagatgg aagattttgc ttttattgct aatccttctt ctacagagat 480
atctagtatt actggaaaca ttgaattgaa tcaacagact tgtcttctta ctctgcgaga 540
ttataataat cgagagaaat cagaagtatc tacagatttg attcaggcaa atcctaaca 600
aggcgcgtta gcgaaaaagt catctcaaac gaaaaagaag aagaaggctt tcaactcccc 660
gaaaacaggg cagaataaaa cagtgcataa tcccagtgac atcttagaga atgcattctg 720
tgaattattc ctgatgcaa ataaactgcc cacacctgta gtagaacaan ttgcacaaat 780
aaatgataat tcagaactcg ag 802

```

<210> 1033

<211> 442

<212> DNA

<213> Homo sapiens

<400> 1033
gaattcggcc aaagaggcct aagcagaggg aaaacaagag gaaatccaac agaagggaca 60
ggctgagaaa aaagaattac aacataaaat agatgaaatg gaagaaaaag aacaggagct 120
ccaggcaaaa atagaagctt tgcaagctga taatgatttc accaatgaaa ggctaacagc 180
tttacaagta cggttagaac atcttcagga gaaaactctt aaagaatgca gcagcttggg 240
gatacaagtt gatgacttct tacctaaaat aaatgggagc acagaaaaag agaagctgat 300
cgtcgaaggg catctaacca aagcggtaga agaaacaaag ctttcaaaag aaaatcagac 360
aagagcaaaa gaatctgatt tttcagatac tctgagtcca agcaaggaaa aaagcagtga 420
cgacactaca gacgcactcg ag 442

<210> 1034
<211> 219
<212> DNA
<213> Homo sapiens

<400> 1034
gaattcgcgg ccgcgtcgac aactaaatat aaaaaatata ggatgatggg tacagtgcct 60
gagaggaggt taaaggagat aaaagtaagt atattttttg agaacaaaat agtaacaata 120
gtgctgataa tgctgtcatt atttatattt tgcacactgt gtgtccagct ctgtattata 180
tttattaatg catccaaccc ttactactac cctctcgag 219

<210> 1035
<211> 118
<212> DNA
<213> Homo sapiens

<400> 1035
gaattcggcc aaagaggcct aagaaaaacat gattatgtgt cactttaata caggaaattt 60
agggtgtttt tgggtgtttt gtttttgttt ttgttttctt tccaaagctc acctcgag 118

<210> 1036
<211> 1259
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (285)

<220>
<221> unsure
<222> (603)

<220>
<221> unsure
<222> (619)

<220>
<221> unsure
<222> (645)

<220>
<221> unsure
<222> (675)

<220>
<221> unsure
<222> (707)

<220>

<221> unsure

<222> (737)

<400> 1036

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ccagaccctc cctcccgtgg 60
ctccaaacta atacggactg aacggatcgc tgcgaggatt atcttacact gaactgatca 120
agtactttga aaatgacttc gaaattttctc ttggtgtcct tcatacttgc tgcactgagt 180
ctttcaacca ctttttctct ccaaccagac cagcaaaagg ttctactagt ttcttttgat 240
ggattccggtt gggattactt atataaagtt ccaacgcccc atttncatta tattatgaaa 300
tatggtgttc acgtgaagca agttactaat gtttttatta caaaaaccta ccctaaccat 360
tatacttttg taactggcct ctttgcagag aatcatggga ttgttgcaaa tgatatgttt 420
gatcctattc ggaacaaatc tttctccttg gatcacatga atatttatga ttccaagttt 480
tggaagaag cgacaccaat atggatcaca aaccagaggc aggacatact agtgggtgcag 540
ccatgtggcc cggaacagat gtaaaatata taagcgcttt cctactcatt acatgcctta 600
cantgagtcg gtttcattng aagatagagt tgccaaatta ttgantgggt tacgtcaaag 660
agcccataaa tcttngtctt ctctattggg agacctgatg acatggnac catttgggac 720
ctgacagtcc gctcatnggg cctgtcattt cagatattga caagaagtta ggatatctca 780
tacaatgct gaaaaaggca agttgttgga aactctgaa cctaatacatc acaagtgatc 840
atggaatgac gcagtgtctt gaggaaaggt taatagaact tgaccagtac ctggataaag 900
accactatac cctgattgat caatctccag tagcagccat cttgccaaaa gaaggtaaat 960
ttgatgaagt ctatgaagca ctaactcacg ctcatcctaa tcttactgtt tacaaaaaag 1020
aagacgttcc agaaagggtg cattacaaat acaacagtcg aattcaacca atcatagcag 1080
tggctgatga aggggtggc acatttacaga ataagtcaga tgactttctg ttaggcaacc 1140
acggttacga taatgcgtta gcagatatgc atccaatatt tttagcccat ggtcctgcct 1200
tcagaaagaa tttctcaaaa gaagccatga actccacaga tttgtacca ctactcgag 1259

```

<210> 1037

<211> 588

<212> DNA

<213> Homo sapiens

<400> 1037

```

gaattcgcgg aaagaggcct aggagctcct aaaaaataaa aagactaaca atccaacaac 60
aacaaaaaag gataatgcat atgaagagag tgtacacaca cacacacaca cagagctctt 120
aaacatatgg aaagatgttc catttctctc ataaaaaag aagtataaat tatcaggaag 180
agatcccata aagagatagc tttgccctt ctctgggggc aaagatgact aagtttgata 240
ccaatttgtt gatgaagggt tggggaaaca aacaagacat ttgctgatg agagtgaata 300
gggacacagc ctcccagaa agcaatttgg taacatcttt gcaaattgta agcacacata 360
tccttcaatc cagcaattct attctgagat ttatgctac agatattttt ttatgtgtct 420
gaaataacct acatgcaagg caattcatgg acgtgttgtt tgctcatagca aaggattggg 480
ggaaaatgta aatgcccagt gattatatga actggtgtct gccatataaa ggaaagacag 540
cagaagtaca aagaacacag cagcatatct atcaggaatg agctcgag 588

```

<210> 1038

<211> 951

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (160)

<220>

<221> unsure

<222> (286)

<220>

<221> unsure

<222> (438)

<220>
 <221> unsure
 <222> (835)

<400> 1038
 gaattcgcgg ccgcgtcgac gcgggagttt ttaatacaca cttaaagtgtc agtttaggaat 60
 taacagggtaa agaaatcaag acattaaaga ttctggatat tagtcctttg tcagatgagt 120
 aggttgcgaa aattttctcc cattttgtag gttgcctgtg cactctgatg gtagtttctt 180
 ttgctgtgca gaagctcttt agtttaatta gattccattt gtcaatttgg gcttttgttg 240
 ccattgcttt tgggtgttta gacatgaagt ccttgcccat gcatangtcc tgaatggtaa 300
 tgcctaggtt ttcttctagg gtttttatgg ttttaggtct aacgtttaag tcttcaatcc 360
 atcttgaatt aatttttgta taagggtgaa ggaagggatc cagtttcagc tttctacata 420
 tggctagcca gttttccntc gagattgcag tgagccgaga ttgtgccact gcactctagc 480
 ctagggtgaca gagtgcagact ccatctcaaa agaaaaataa ataaaaataa aatcaagagg 540
 aggcagaaaag gggatctgca ggagaggaaa aaaggcagca ctcccaaaaag catggatc 600
 attatatttg tgaatttttg taaactgtgt gtatacgtgc acttacaat aactttaaaa 660
 atgtaataaa tgaatataaa cagagagagg cattatagat ctgacccaa atagccagag 720
 tagcttctgg tcatccacac tggccactgg tttcttgtaa agggttcacg cagactttag 780
 atgtaattga accatttgga gtagaaagaa atatgaatac tagtctgcaa agacngatat 840
 gaattctctt ggagaacttg agcctctctt tggctggtt ccaaaacaac cagtttctt 900
 ccattgtgta gggaggaaat tctcatgggc tgtgccagga ggaagctcga g 951

<210> 1039
 <211> 221
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (163)

<400> 1039
 gaattcggcc aaagaggcct agggaaatat agtaattcct aggcatttta actagtgaat 60
 ggataccatg aaccataaatt ggtaaattat ccaaaaatca atcatattta gctaaggaaa 120
 gtggtgcaca tgtgtgtgca tgtgtgtgtg tatctgtgtg ttntataatg ggaaattcac 180
 tttaaactaa tgaaagaatg atttgaaact ctgaactcga g 221

<210> 1040
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1040
 gaattcggcc aaagaggcct agacatatat gaggccttct ccagacttca gtaaaattgc 60
 ttgggttcctt gtcacaagcg caaatctgtc caaggctgcc tggggagcat tggagaagaa 120
 tggcacccag ctgatgatcc gctcctacga gctcggggtc cttttcctcc cttcagcatt 180
 tgggtctagac agtttcaaag tgaaacagaa gttcttcgct ggcagccagg agccaatggc 240
 cacccttctc gtgccatag atttgcctcc agaactgtat ggaagttaaag atcggccatg 300
 gatatggaac attccttatg tcaaagcacc ggatacgcat gggaacatgt gggtgccctc 360
 cgtgaatctc gag 373

<210> 1041
 <211> 755
 <212> DNA
 <213> Homo sapiens

<400> 1041
 gaattcggcc aaagagccta gtccagcagc cgagcgttgc ccaactgaga tcaacaatgg 60
 tagaccagc gatcaacttg tttttcctaa aaatgaaagg tgaactggaa cagactaaag 120
 acaaaactgga acaagcccaa aatgaactga gtgcctggaa gtttacgcct gatagccaaa 180

```

cagggaaaaa gttaatggcg aagtgtcgaa tgcttatcca ggagaatcaa gagcttggaa 240
ggcagctgtc ccagggacgt attgcacaac ttgaagcaga gttggcttta cagaagaaat 300
acagtggagg gcttaaaagc agtcaggatg aactgaatga cttcatcatc cagcttgatg 360
aagaagtaga gggatatgag agtaccatc tagttctgca gcagcagctg aaggagacac 420
gccagcagtt ggctcagtag cagcagcagc agtctcaggc ctctgcccc agtaccagca 480
ggactacagc ttctgaacct gtagaacagt cagaggccac aagtaaagac tgcagtcgtc 540
tgacaaacgg accaagtaat ggtagctcct cccgccagag gacgtctggg tctggatttc 600
acagggaggg caacacaacc gaagatgact ttccttcttc tccagggaat ggtaataagt 660
cctccaacag cttagaggag agaactggca gaggaggtag tggttacgta aatcaactca 720
gtgcggggta tgaaagtgtg gactctcatc tcgag 755

```

<210> 1042

<211> 219

<212> DNA

<213> Homo sapiens

<400> 1042

```

gaattcggcc aaagaggcct aaaaaaagag aaagaagact tgaagtttgt gtttgggtgt 60
tttccaggtt atccaaatat gaaagtcagt tctaccaggt ctcaaaacta cggaactaat 120
gttacatgtc agaaagtctt acaaatgagt acttatgtta tgctagtttt tcttctcttt 180
tcttatTTTT taaagaacaa agacattcgg ctactcgag 219

```

<210> 1043

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1043

```

gaattcggcc aaagaggcct aggcgggaga aattctttaga aacattcaga aaaactcgat 60
tttaatccgg ttaaaaatca tcagtgtcat tatcatcatc atcatcacca tcataagtat 120
taataataata ataataagta atagtaacta gtaacaacaa taaaaaggaa atcagcggaa 180
agtcaggaaa aatgttaaaa aaaaattgga ataacttact cgag 224

```

<210> 1044

<211> 110

<212> DNA

<213> Homo sapiens

<400> 1044

```

gaattcggcc aaagaggcct atgcggTTTT ttgtTTTTTT gaaacaggct ctcactctgt 60
catctaagct ggggcacagt ggcattgacca tgctcactc caacctcgag 110

```

<210> 1045

<211> 216

<212> DNA

<213> Homo sapiens

<400> 1045

```

gaattcggcc aaagaggcct agggTTTTTc tatttccgta aaaaacaaca gggattgcat 60
tgaatctgta gatcactttg gataatatg acctcttaat gatattaagt attctaatac 120
attaacatgg gacatatctc catttatTTa tgtctTTTaa attttctTTt ggcaatgttt 180
tgtattTTTc attgcacaag tctttcacct ctcgag 216

```

<210> 1046

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1046

```

gaattcggcc aaagaggcct agagtgaata acctggTTTT gaaacagcaa aatctacctg 60

```

```

ttactcgtat tttggacaat cttatggaga tgaagtcaaa ccccgaaact gatgactata 120
gatattttga tcccaaaatg ctgcggggca atgacagctc agttcccaga aataaaaatc 180
cattccaaga ggccattgtt tttgtgggtg gagggaggca ctacattgaa tatcagaatc 240
ttgttgacta cataaagggg aaacaaggca aacacatttt atatggctgc agtgagcttt 300
ttaatgctac acagttcata aaacagttgt cacaacttgg acaaaagtaa cacagaagaa 360
ccttactatg ataattctact tggaaatgtg ataaatgtaa aaagaagaaa actcgag 417

```

<210> 1047

<211> 163

<212> DNA

<213> Homo sapiens

<400> 1047

```

gtccactttc ccgcatcttc cttgacagcc tactcttttt tttttcctgt taccttttac 60
tattttcttt cgatctttgt gagttttctt tctgcccac ccttaaagt tgtttcctag 120
aactctgtcc ctaaccattt tctattttca cccccaactc gag 163

```

<210> 1048

<211> 469

<212> DNA

<213> Homo sapiens

<400> 1048

```

gaattcggcc aaagaggcct agggaatgag agccagccct ctgcacctgt gggtttgcac 60
cctcagattc aagcaaccat ggactgaaaa tgtaggcagg actgtgatgg ttacatctat 120
actgaacgtg cacacaatgt tttcttgtca ttatctcctg aactagacag tggaaaccact 180
gtttaaactg catttacatt gcactgggca gtagaagtaa cctagggatg atttagagtc 240
tacaggagga tgtgactggc cacatgcaaa ccatgtgtcg atgtatatga gatttgagca 300
cctgtggatt ttggtatcct gggcgggtgga ggctctggag ccaatctcta atggatacca 360
agggaggact gtacttggct ctggaggagg ccgttctaac cactccccac actttcttag 420
aacttgggaa gcttgaggca gaggtggccc ccaagagttg gtgctcgag 469

```

<210> 1049

<211> 203

<212> DNA

<213> Homo sapiens

<400> 1049

```

gaattcggcc aaagaggcct atcagattgaa ttctagacct gcctcgagga taactttctg 60
attcctctct gccagccgtt ttgcgtctct tggaaagcca aacggtgacc atgcttctta 120
atztatgcct tcagggtctg gcttctcctt tctcctctcc tttcctgtca caccatgcat 180
acatacatat aaatacactc gag 203

```

<210> 1050

<211> 691

<212> DNA

<213> Homo sapiens

<400> 1050

```

gaattcggcc aaagaggcct acacacatta gtccaggcct acacatgac aggatcatca 60
acatcactgt tgatgttgat gatccactg gaaggtcttc aggggcagta acacgcatgg 120
agctgtcatc tcctatgatg tcaatgcctt cttctggata cttcctgagg gacctgcctg 180
aggctgtttt acagttaaat tttaaaaaat ttacattgaa ggagcacact ccaaaatcaa 240
gataaaaagt ataatatagt aaatagataa accagtaaca tagtcattta ttatcattgc 300
taaataatat gtatataatt gcatgtgtta tactcttata caactggcag tgcagtaggt 360
ttgtttgcac cagcagcacc acaaacatga gtaatgcctc gtgctgctgt ttcacgaagg 420
cgatgatgtc acggtgacag gaagttttag ctccattata attttatggg aacaccattg 480
tatatagtgt ggtgttcctt gttgacccaa acatcattat gtggtgcatg actgtatcta 540
tatttaatat ataatatgta aaatattata agtatcttta cagtagaatc caacctcttt 600
ggcgaggcat ccagggcatt tcacagttgg atccctgcct acctgttgag ccttgtcttc 660

```

caccatgttc ctcacccaca ccatactcga g

691

<210> 1051

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1051

gaattcggcc aaagaggcct gcgcttactg aggacctact ctgctagctg ctgggggactc 60
tgtgattgaa gatctgctcc ctgtccctagc gttgtaatag tatattagta ggctaaaaga 120
taacagccat ttcccgtata gcatttgtcc atatgtataa tctcttcagc tacatcctcg 180
ag 182

<210> 1052

<211> 184

<212> DNA

<213> Homo sapiens

<400> 1052

gaattcggcc aaagaggcct aaaaatacat gcaacataaa atttgtcatt ttaactacta 60
aatgtacaat tcagtgggtat ttattacatt cacacattgt gcaaccatca ctactatttt 120
caaaactttt ttatcacccc aatcagcacc tttgtaccct ttaagtaata actccgggtc 180
cgag 184

<210> 1053

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1053

gaattcggcc aaagaggcct tcgagacagt ggatgggctg gagaaggaac gtgacttcta 60
cttcagcaaa cttctgtgaca tcgagctcat ctgccaggag catgaaagtg aaaacagccc 120
tattactcga g 131

<210> 1054

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1054

gaattcggcc aaagaggcct agtggggcgt ttatatcttg tggagtaatg ggtgtttttg 60
aagtctgtcc tgggtactgc acattaaaag gaatatcatt ttctgaaaca ttgctatttt 120
ccacaccaga aatcatatcc tcttgctggt ccatgtctga agaccttaca cgagaaagtc 180
ttaatgtaag tttagtagag tccttggatg gagaactaat tatatcatac attgccgctt 240
tctcactctg ctctttttca tccttgccca atttcatttt cttctgcttc ttttgttttc 300
tttctggaga atctagcaag atatctgggt gaactctcga g 341

<210> 1055

<211> 130

<212> DNA

<213> Homo sapiens

<400> 1055

gaattcggcc aaagaggcct agagctttcc.tactttttcag gtttaaattt atcttttttc 60
ttctaaaagt atgtttttat cttctaattt cccatatctc tctattcttt tcttcgcctt 120
cccgtctcga g 130

<210> 1056

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1056

```
gaattcggcc aaagaggtct aggtagaata gaaacttcag catctaccaa gtcaagaaga 60
taacttggaa aacaattctg actgacattc caatttaate acacttaatg aattctgcac 120
tgctactcga g                                     131
```

<210> 1057

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1057

```
gaattcggcca aaagaggccta taggcctctt tggccgaatt cggccaaaga ggcctaggta 60
agatctgagc ctgccaaggc cccaggggat atggggaacc cagcagagat gagtgcacaa 120
gaagaggttg ggggcaggga ccagacagac ctggatttca acctcgcagg agctgctcga 180
ccctgggcaa tttgcttgcc ccttcctggc ttcaatttcc tatgtataaa atgaggagaa 240
taatgtcaaa taccatatt ctgagaaaaa ccaaataact ggattgaatt ctgacctgc 300
ctcgag                                     306
```

<210> 1058

<211> 141

<212> DNA

<213> Homo sapiens

<400> 1058

```
gaattcggcc aaagaggcct gcccttctct cacaatcata gagttttcta gcggtcacag 60
ggcatatcac aacagatgat gcataaagta gctatgacaa tccagctact ttctgttaag 120
ctagatatca tagttgcaaa g                                     141
```

<210> 1059

<211> 626

<212> DNA

<213> Homo sapiens

<400> 1059

```
gaattcggcc aaagaggcct agtagcgatg gcggctgggc cgagtgggtg tctgtgccc 60
gcgtttgggc tacggttgtt gttggcgact gtgcttcaag cgggtgtctgc ttttggggca 120
gagttttcat cggaggcatg cagagagtta ggcttttcta gcaacttgct ttgcagctct 180
tgtgatcttc tcggacagtt caacctgctt cagctggatc ctgattgcag aggatgctgt 240
caggagggaag cacaatttga aacccaaaag ctgtatgcag gagctattct tgaagtgtgt 300
ggatgaaaat tgggaagggt cctcaagtc caagcttttg ttaggagtga taaacccaaa 360
ctgttcagag gactgcaaat caagtatgtc cgtggttcag accctgtatt aaagcttttg 420
gacgacaatg ggaacattgc tgaagaactg agcattctca aatggaacac agacagtgtg 480
gaagaattcc tgagtgaaaa gttggaacgc atataaatct tgcttaaatt ttgtcctatc 540
cttttgttac ctatcaaat gaaatattac agcacctaga aaataattta gttttgcttg 600
cttccattga tcagtcacca ctcgag                                     626
```

<210> 1060

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1060

```
gaattcggcc aaagaggcct agctgttttt tttgttggtt ttgttggtgt ttttaatttga 60
taacttcagg aacttgtatc tgtgcgtaga gcagtgatcc agacagctgt acttttatga 120
acagtcactc tgactgccaat attagtttgt agtgcaaatc ttgagtgaga acagcacctg 180
ttctcaatgt ggatgaaaaa ggcaaatggt atgggaagca ttctcgag                                     228
```

<210> 1061

<211> 278
 <212> DNA
 <213> Homo sapiens

<400> 1061
 gaattcggcc aaagaggcct aagaattcta gaccgcctcg agacgccacg cccagccggg 60
 aattctcatt ttttatgagt attacaggtg aaatatccag acacctaaca gggcagaaga 120
 ctcattttta tcaaagaaat aaaaataaat ttttggtttt ttggaaatac tgtgtaaaga 180
 ttcattgtaa aattttcttc agcatgttaa cagagaaggt gttcactctc ctctgtgcat 240
 tttttttcca gtttgaattg acaaggagcc gactcgag 278

<210> 1062
 <211> 168
 <212> DNA
 <213> Homo sapiens

<400> 1062
 gaattcggcc aaagaggcct aaagatgctg gggagaaaga acatgtcact aagagttctc 60
 tgttccattt tccttaccat ttcttttttg aatctggctg cttttccttg ttgtggctgt 120
 gacactagta tcactctctg tcccatcacc aacaccatcc aactcgag 168

<210> 1063
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 1063
 gaattcgcgg ccgcgtcgac cgtcgattga attctagacc ttctctctgc cttttctctt 60
 cttctctctg ctgtcgccga agaatttcct cctgttgtct tcggagttct tcttgctctt 120
 ttctgtcttc ctcttccctg ttgcccctca tttctgcctc tcttctctct tgccttagct 180
 ttgcagcttt ggccttctct agctgctgaa gctgttccag ggcagggcct ggtgtcgtgg 240
 tgtccagagg aagatcccat acactaccac cttctcgag 279

<210> 1064
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 1064
 gaattcgcgg ccgcgtcgac gcagtcctaa atatatagct ggatacttct taaccttggg 60
 gtatctatct ttaatcatat ttgttgtatc tttgaatcca aaaagggtct ggtagacca 120
 atagtgaaga attacgttga attaagtaat agttttcaga agtggataag atgttaatgt 180
 taatgggtct atccaattgc tcattttcat cttggaaagt ttccctatct ttattcagag 240
 gaattactct gatatgttta cctatagtc ttcccgatcc tgatatactg tctaggacag 300
 tataatgtc tatgttttcc tgttcacag tacgtagcag tctcgag 347

<210> 1065
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 1065
 gaattcgcgg ccgcgtcgac ctaaaccgtc aaatttcaga acataaaaat aaatttccat 60
 ttacagattt ccccttcca gttccaaaag tagttattct agagtaagta ttcaacacat 120
 aaaatttagc tgaatcaaat aaaaaacaat caccaaatgc aaatatcaat tccaaagcac 180
 agattttata tatactgctt tcataatttc cttttgtctg ttttatctag aaaagaagca 240
 aaaggactcg ag 252

<210> 1066
 <211> 221

<212> DNA

<213> Homo sapiens

<400> 1066

```

gaattcgcgg ccgcgtcgac attatcttcc aggttggtgt tttccacaa aatattgggc 60
taaaaagata atgcagggtt tgcagatact ctatcatggc agaaatcaaa cttcaacatt 120
cctttggcac attttgtttt tctttaattt ttattgtgtc ttatctgtgt attttgtata 180
tgggggaagg agagagcact agcaagcatg agcgtctcga g                221

```

<210> 1067

<211> 203

<212> DNA

<213> Homo sapiens

<400> 1067

```

gaattcgcgg ccgcgtcgac aaacaattca ttctaattgt tgcctatgtt atcaagaagt 60
gtactattgt gagtaaatct cagaatttag gactgtgtga attctgatcc ttacccttga 120
tgatgtattt tcccttagct atatcactac ctttgtttgc taccagtgtt ataatgaggg 180
ttgttagaat tcacggactc gag                203

```

<210> 1068

<211> 204

<212> DNA

<213> Homo sapiens

<400> 1068

```

gaattcgcgg ccgcgtcgac acaggcttaag agagtagatc aactgaagaa aaatataatt 60
aaaagaactg ctacgagttc cttaattttt atgacttgga agtttttctt gtttgttttt 120
gagacagggt ctttctttgt caccacaggct gcagtgcagt ggcattgatct cagctcactg 180
cagcctcaac gtccttggtc cgag                204

```

<210> 1069

<211> 244

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (26)

<400> 1069

```

gaattcggcc ttcatggcct actgcnattc tctgtttttt tttttttttt ttcttctctc 60
ttttgtgagc agatctcagg ggagggtggag gaaaggacaa agggaaaggc tctgagtaat 120
ttcttcaaaa tctgtattct ttgtattaaa aatgttcatt cctattaatt ccagattgtt 180
tgcaatgtgc ctactttgcc actggcaaat tgtgacatct ctgaagtcgg ccttcattgtt 240
cgag                244

```

<210> 1070

<211> 217

<212> DNA

<213> Homo sapiens

<400> 1070

```

gaattcgcgg ccgcgtcgac gtgtcatttt tttcttatca agaagtcttt ttttaaaaat 60
catccatttc ttgccccatt atgggtgatgt cttttcttaa atccttgaat tttaaaggga 120
aacaataata ttataatatt tgtaatagcc ttttaataga tcattgcttg ctaattctct 180
catttgcata attaatgaat ctgtttttac taaccag                217

```

<210> 1071

<211> 127

<212> DNA

<213> Homo sapiens

<400> 1071

```

gaattcgcg cgcgctcgac attgaattct agacctgcca cacctccagt ttaattcttc 60
accttcaaat gatgtcccca ctcagtctat tctctctctt ctgcataatt ctcaccacgt 120
cctcgag                                     127

```

<210> 1072

<211> 755

<212> DNA

<213> Homo sapiens

<400> 1072

```

gaattcgcg cgcgctcgac gtctctcttc tgcctctctc cccttggtta catataaaaa 60
tacgtttttc agttgggcgt ggtggctcac gcctgtaatc ccagcacttt gggaggccaa 120
ggcgggtcga tcaagaggtc aggagtttga gaccagcctg atcaacatgg tgaaacccca 180
tctctagaaa aatacaaaaa ttaccaggt gtggtggcgc gtgcctgtaa tcccagctac 240
tgaggaagct gaaggaggag aatcgcttga acccaggagg cggagggtgc agtgagccga 300
gattgcgcca ttacgctcca gcctgggcaa tagagcgaga ctccatccca aaaaaaaaaa 360
aaaagacaag tttttgtgaa tatggcctaa tatcacaac agaatacca aagaatctat 420
caaaatgtta ccacattgat attatggcaa aggcattaac cagctctagg atttgaatc 480
aaccagctct aaagttttta ttttacagat aaggcaaaa cagtgggtta gagagacgaa 540
gtaacttctt caaggttaca gttagtaaat atcccagtta ggattcaaag caagcttttt 600
ttgctttaga attcttcccc aggtcactgc ctcttccatc aacttcaact atttataaat 660
tctcccaagt tccccaaggg agtttagatt gaatgatgta aagagcagaa acataggact 720
gactgaatga ttctcatttt tttgactctt aaagt                                     755

```

<210> 1073

<211> 580

<212> DNA

<213> Homo sapiens

<400> 1073

```

gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagttgc 60
catctcaaaa aaaaataaaa ataaaaata actgattcaa tcttgcaac agccctgtga 120
tgcaagtatt cttatcccta ttttacagat tgggaaatga ggcacagaga ggttaaatgc 180
cttaaccagg gtcacagggt acatcattgg taaatggcag aaccaggact tgagaccagg 240
cagtctagct ctctgcccc tactcctaac catcacctta cacagcctcc ccccagggtt 300
tattacattc accagattat ttggtgaagg aaatcccaat tttgttatgg cgttggtaac 360
tgctctatga actatatagt taatcttaat tccaaaagca agaagtctgt tcaagcataa 420
actcatatcc cttgaatcat ttttctagag gaacatggaa tgtggtgctg atgggatgtt 480
gctgtgtctg ttgcaaccca atattttaa caaggtaaaa gggtatatat gagcagaata 540
agagcttaac tccaagtagc taaggagaga aacctcgag                                     580

```

<210> 1074

<211> 322

<212> DNA

<213> Homo sapiens

<400> 1074

```

gatggagaga aatcacaggc tggaggatat ggagagaaat cacaggctgg aggatatgga 60
gagtaatcac aggctggagg atatggaggg taatcacagg ctggaggaca cggagagaaa 120
tcacaggccg gaggacacgg agagaaatca caggccggag gacacggagg gtaatcacag 180
gcccggaggac acggagggta atcacaggcc ggaggacacg gagggtaatc acaggccgga 240
ggacacggag agaaatcaca ggccggagga cacggagggt aatcacaggc tggaggatat 300
gcagagtaac cacagactcg ag                                     322

```

<210> 1075

<211> 399

<212> DNA

<213> Homo sapiens

<400> 1075

```

gtttatgtca tggttggtgc agatgtcccg ttttcttctt gtttacgaga agttgaaaaat 60
ccacagaatc aattgagatg tagtcaagaa atggagcctg taataacatg tgataaaaaa 120
tttcgtactc aattttacat tgactggtgc aaaatttcat tggttgataa aacaaagcaa 180
gtgtccacct atcaggaagt gattcgtgga gaggggattt tacctgatgg tggagaatac 240
aaacccccct ctgattcttt gaaaagcaga gactattaca cggatttctt aattacactg 300
gctgtgccct cggcagtggt actggtcctt tttctaatac ttgcttatat catgtgctgc 360
cgacgggaag gcgtcatcca actggtccac cacctcgag 399

```

<210> 1076

<211> 219

<212> DNA

<213> Homo sapiens

<400> 1076

```

gaattcgcgg ccgcgtcgac cgaaatgcac ctttggtctg catttggtgc tcagtgtatt 60
ctattggaca gtcagtgcat tatatactct gacttcagtt tggcatctca atttttgaca 120
ataacatarg aggggaaatc agaagccttt ctaaaagcta cagtttggct gggcgtgcag 180
gctcatgcct gtaatcccaa cactttagga gagctcgag 219

```

<210> 1077

<211> 169

<212> DNA

<213> Homo sapiens

<400> 1077

```

gaattcgcgg ccgcgtcgac cgattaagca gttatgcatt actggggaaa ctacctttta 60
gagatttaga aaagctttag aatttagtaa atcaaataaa aataggata caatatttta 120
gacatagggt ttcaacatgt tacatggtgt gataatggag tgcctcgag 169

```

<210> 1078

<211> 152

<212> DNA

<213> Homo sapiens

<400> 1078

```

gaattcgcgg ccgcgtcgac cacagccagt agatgattac ttcgtgggaa ggattcctcc 60
tcttcctcgt cctcagcccc ctctactctg ctccccgggg gccaggaccg ggtggagggg 120
gctgtgggaa ggattcctcc tcttcctcgt cc 152

```

<210> 1079

<211> 235

<212> DNA

<213> Homo sapiens

<400> 1079

```

gaattcgcgg ccgcgtcgac cctgccttgg gcaaaatttg tgtgtgtggt tattcacaga 60
ggaggagcca gataggtagc tcagtccata aactatggaa ggtagcagta tcccttactg 120
cagtggcttt caaatttgac atgcacaaaa atctcctgga gagcttgta aaacatagaa 180
agcagggcct catccccac gtttttgatt cagtaggtct ggggtggggc tcgag 235

```

<210> 1080

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1080

```

gaattcgcgg ccgcgtcgac ccacatctct ttgctttagt ctatggtaag gctattcaaa 60
ttctacattt tcattagggc ttccatagct actaaaggga ttaattacg tgttcctcat 120
tctttttatt gaactgtgta tgtttttcat agtttctttg tattatgatt gtgtttcttt 180
cttctacctc cgaaagctcg ag                                     202

```

```

<210> 1081
<211> 231
<212> DNA
<213> Homo sapiens

```

```

<400> 1081
ggctcgcctg cacttagaga accttacaga accatgtggc tggggggtga gaatgactcc 60
cagcataaac ggccctgcag tgcattgtgc gttctgagcc tcatcctttc cacaagtgc 120
tcttgagag ccagcacagc ggccccactg ggccctgtct cccctgtcct ggccctcggt 180
tcttctgtaa catccccctt tctttcatat aaacatcaac gcagactcga g          231

```

```

<210> 1082
<211> 407
<212> DNA
<213> Homo sapiens

```

```

<400> 1082
gaattcgcgg ccgcgtcgac cagcaaatcc caaatatcca gactgactcc tatgaaagta 60
tggcaaaaac cacaccaact ggtggccttc caagggaacc ccaagaactc atggttgata 120
accctttgaa tcagctctcg actctagcag ggcagttgtc cagtctgcc cccgaaaacc 180
aaaacctgc atccccgat gtagttccct gccctgatga aaagcctttc atgattcagc 240
agccctctac ccaagcagta gtttctgccc tatcagcaag tattectcag agctcctctc 300
ccacaagccc agaacctcg ccattccata gtcaaaggaa ctatagtcca gtggcaggtc 360
caagcagtga gccaaagtgc cacacgagca ctcccagcga cctcgag          407

```

```

<210> 1083
<211> 449
<212> DNA
<213> Homo sapiens

```

```

<400> 1083
gctctgagtt ctctttatct tgggtggtctc agtctctatc ttccacgttg tgaatttttc 60
tcaaatatat ggtgaccta tggatctgtt catgttttaa gagttaggca tccaaaagct 120
gattggaagt tgtgtgtgcc aactgggtgag cttttccact agggtcacca ggtgggcacc 180
tggactcacc attggagaac actgcctgtc agtatttgca cgtgttttct ctggggctca 240
ttctgtttct tgagagatat tcccactact ctcttctctg ggaaacgggc atacacaggg 300
cttttagcct atgctgagta ctcatgtggt ttcaaaaatg gtgtcccatc tgggcagaag 360
tccccatgag cacttggtct gactggcaaa ggacaccttt tgcccccttc tccagacata 420
cccagctctg agcttgagca atgctcgag          449

```

```

<210> 1084
<211> 216
<212> DNA
<213> Homo sapiens

```

```

<400> 1084
gaattcgcgg ccgcgtcgac cacttaaaaa tgccactgtc tgtggtttcg gtataaatcc 60
tgagtataac ttttcacagt gacaaaaatg attgagatgt actttactgg gttttttgtt 120
gttggtttgt tttttgagac agtctctttc tgtagcccag gctggaatgc agtggcacga 180
tctcgactca ctgcaacctc tccatccaga ctcgag          216

```

```

<210> 1085
<211> 447
<212> DNA
<213> Homo sapiens

```

<400> 1085

```

gaattcgcg cgcgctcgac ggagatgttt acatttttctg tgacgtgtat ttttctaccc 60
ctcctaagag ggcacagtct cttcacctgt gaaccaatta ctgttcccag atgtatgaaa 120
atggcctaca acatgacgtt tttccctaata ctgatgggtc attatgacca gattattgcc 180
gcggtggaaa tggagcattt tcttctcttc gcaaatcttg aatgttcacc aaacattgaa 240
actttctctt gcaaagcatt tgtaccaacc tgcatagaac aaattcatgt ggttccacct 300
tgtcgtaaac tttgtgagaa agtatattct gattgcaaaa aattaattga cacttttggg 360
atccgatggc ctgaggagct tgaatgtgac agattacaat accgtgatga gactgttctt 420
gtaacttttg atccacacac gctcgag 447

```

<210> 1086

<211> 263

<212> DNA

<213> Homo sapiens

<400> 1086

```

gaattcgcg cgcgctcgac aggatgtctc caactgtatt cctgagctgg acagtgaagc 60
agccatgttt tctgtctacg atggacatgg aggtaacttt aacagatcat attggtaaca 120
ttctaggacc ccaattccag acgttccagg gcaagaacag gtccctttgt tcatttactt 180
tccagggtct ggccctcatt atcatttctt gcgtgggtgt gtttttctgt attctgtcat 240
tcttttttcc cagcaggctc gag 263

```

<210> 1087

<211> 428

<212> DNA

<213> Homo sapiens

<400> 1087

```

gaattcgcg cgcgctcgac ccaaaaacca aaaacaaaaa caaaacaata acactgaata 60
aagtcataat ggtaataaac attgctgttc tgcttggttt tagcgctgctc ttcgcggttt 120
cctgcttgct gattgctgac ggagcaagta aaccaaaccg tgagtgtcct ctccctccat 180
cttctgtcag ggaccgggga gagagtgtcc tgagtgtctc ccaggccccc ctgctcttgg 240
acactgtcct gggcctgctg ctccctgtct aagtttagagg ggacacctgt tacgcctcta 300
ctcagttact tatctcaaat agacggcgag atcagagagc agccacccca gacaggagct 360
tccagggtat gagcaacttc catctcatca ccaaaccaag ccagtccttc actgatgaca 420
acctcgag 428

```

<210> 1088

<211> 226

<212> DNA

<213> Homo sapiens

<400> 1088

```

gaattcgcg cgcgctcgac gtagaaagca tctgtagact tccgcagaaa gcatccgtag 60
acttccgtag aaagcactga tgatgttgta taaacagacc ataaggagat tgaagccctc 120
catgtattct gtttgccctt ggaatatatg tgcattgtgca tgtgcttggt tgtttatttt 180
catttgggtt tatgccctat ttttaatttg taggcagcaa ctcgag 226

```

<210> 1089

<211> 227

<212> DNA

<213> Homo sapiens

<400> 1089

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gaattcgcg cgcgctcgac gctgatcaac aggggtgtcgt tcaaggaatg ataacaggaa 60
ttcgaggatt atgcaatggt ctgggaccgg cctctatagg attcattttc tacatatctc 120
atgtggaact taaagaactg ccaataacag gaacagactt gggaacaaac acaagccctc 180
agcaccactt tgaacagaat tccatcatcc ctggcccaac cctcgag 227

```

<210> 1090

<211> 102
<212> DNA
<213> Homo sapiens

<400> 1090
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cattactaat ttttttaaga gatgaggctt tgcttactcg ag 102

<210> 1091
<211> 646
<212> DNA
<213> Homo sapiens

<400> 1091
gaattcggcg ccgcgtcgac atcatgactg ttatttttat ttgcacttgc tggctcttgt 60
agcagcattc agcacagggtg ccaaaatatg cttcatttgg ggggcagatc tattttgaca 120
gtatttgact acatatagca agagtgtgaa atatgttaaa cactagacat cctggttatc 180
aaaaccaatg agcattactt tcatggcagc aagtgtcatg cagttatttt ctgaatttgt 240
caaagaggca gtagtttcta acccctgttc tatagtagtt acaacaattt cacaacctat 300
gtttacagat tcttcataaa tacatgcata ctgacactat aatcatggga ggtgtaacca 360
tgattagtag gcgaggtacc taccactttt tttttttctt cccctggcta cttgagtaga 420
atgcattata ccagatctgg tcaactttcat tgaaatgggt tctaattttt ttcccaagtg 480
ctgttgggtt tttttcttct taaggaaaac gttgtcactt ttatgttata aacttgaatt 540
tataaagtgc tggtaaatga tttttaatga tttagtgca tgttttaaac ctctaggacc 600
agagcatagt cagagcattt tcttttaaat tgtgcactaa ctcgag 646

<210> 1092
<211> 195
<212> DNA
<213> Homo sapiens

<400> 1092
gaattcggcg ccgcgtcgac ctgtaaatc atttgtcatt caaagcggaa taacaagttg 60
tccctagcaa aaccgctgag cgctttataa ttttgtggtg tatttttgtc agtaggtagc 120
agaggcggaa gtattttttg gtgtaattct tgaaattttc tgacaggaaa caaataaaga 180
tagatgagtc tcgag 195

<210> 1093
<211> 709
<212> DNA
<213> Homo sapiens

<400> 1093
gaattcggcg ccgcgtcgac atcacaggtc tgtggtggcc ccgaaatggg gggcctgcta 60
gtcaggagga tgcgtgtcac actgtgtgtg atgaatctcg ccagaaaggc tcctgaggtc 120
ccaggttggc acttctccct gcagccattg tagaagatct gctggctcct gcaggcaaag 180
ctacagccag aatgtccgtt tgaaactcct agctcatctg tcaccgagct tcatccgaat 240
gtgccacgga gcttgctctc cacttcctcc gtgcagcggc cctgccacag ccctccctcg 300
gcacactttg accctttgta ggattggaat tagcaggact cggctattta aagcaccagt 360
ctgggggtgc ctggggccct gctgaccctt tcctccagag cagccagccc agcccgggaa 420
caagacggac ttccctctccc ttcggaactca cagcctttgc agagtcaagc tccacttgaa 480
gctcactcag taatatcctt tcaatgtgtt ttatattgtt ttgactgcct tttttttag 540
aaataaaaat tgaccttaga atttatcgtc agataaactt gtaaagattt gaatattaat 600
gtcttttcaa ggcaaatggg attgtccccg cactagtaga gaatccatgt cgctctgaca 660
ccccaaggaa gccgacgac caaatgccgt gtgtcaccaa cccctcgag 709

<210> 1094
<211> 770
<212> DNA
<213> Homo sapiens

<220>
 <221> unsure
 <222> (44)

<220>
 <221> unsure
 <222> (66)

<400> 1094
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 gatctnatta gctgagaatt atctcagaag aaaattcaaa tcaatttact aaaaccaagc 120
 aactgcaccc acagtcttct tccactgact tcctaataaa gataaaacac cagacgtcaa 180
 aacctatatg aggcgagtga agcttgacat ttatgccaaa aaaagggtgc cctctaggg 240
 aaaaaataac tgcctcctta aggactcaag atcattaatc ctcatcctac ccactaatta 300
 ccttttctac tccatccag tctcatgagg gatgatgttt tattatgttc ctctgttgg 360
 aggggctaag ccattgtctt ctactcaata aatttttact gagcttctat tatgtatcag 420
 gaactgtgcc aggcattggag gctaaaaaca tgtataatta tagtagtaac cttcattgag 480
 tactgactat gtgccagcta ttttaaatgt attatctttt aaatcctccc aacagcccta 540
 ctcaaatagg tactattatc acccccactt tacagatgag gaaatcgatg cacagagaaa 600
 ttaagcacct tgcttatggt cataagtggg agaagtagaa ctttaaacct acttttctct 660
 agtaccagag tcaaaacttt cattgtaaca tgtacattac tgtgataagg attttgccgt 720
 atctcatgtg attgtcacag aaaacaccat aaggcagggg caacctcgag 770

<210> 1095
 <211> 774
 <212> DNA
 <213> Homo sapiens

<400> 1095
 gaattcgcgg ccgcgctcgac caatttatgt ggcatttaaa gaattttgaa attcattgta 60
 ttttgtttat cctttttcta tgagtattcg aatttctatt ctcgctctaa tatcagagat 120
 ttttaattgt tcttatagtt agttaactta aacctgtggc ctaggttagc catctaactga 180
 attagttcag attatttatt ttaacctatt gtgcgata gtattttagg tttttgttga 240
 gatggatact attgtatatt taaaaatgca tagaacttgt caaagatagc ttaatttgcc 300
 tttctacctt cataaaaatg ttaaaagtta agggattttt aaaatgtcat tagatattct 360
 tatctgaatc atttatatat taccataaat cacagttgta ttaagtcagc catgaagatt 420
 tcttccttaa tgcaaatgaa cgcataaggt atctagaaag cgttaatttg tgagggaaca 480
 aattaaagcg gttagaattg ctgtggagct gtatatgata gatgaaatat ttttaattgaa 540
 gacacaaata gttctaatat ttctaagag aaagtgtgta gatcatttaa tgcgtagga 600
 gaccaaagta gaaatttggg aaaagttaaa atgactccta aattaccag caagttgtaa 660
 agatacacct ttctcagcat gcattctcat gatagcataa caatgtataa tatatctgat 720
 tactgtcata attgactacc ttgaaagata atgggttctaa ggggtcaaact cgag 774

<210> 1096
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 1096
 gaattcgcgg ccgcgctcgac gtagtatgtt ctttttttgg aacagggtag gcattttgtt 60
 tattgtttgc ttgcttctag gtgttttcgc catcaggggtg tattggaggc tgacacttaa 120
 tgggtgtgtg ttacgcccag aactgctcgg tgcgggggtt ctaaaagaat gcgctggtgt 180
 tcttggtctc aagtttctgc ttgggagaag cagattcagg aagtaggtgt tgcttaaaaa 240
 taattcttgg tttttatcta atcagataat cattgattac ctaccagggtg ccagttagat 300
 ggtgttttgt ttactcaaga atgaagtaga actattttta aaacctgttt ccattgaggt 360
 tcacgttagg tgacctaaagc ttggaaggag aaaaacattt tctgggtatg aataatgagt 420
 tttgtaatac attcccagtt agaagaattt cagtctctgg gccattgagc ttggcaggtg 480
 tgagatctcc catgtgacag aagcctggca tctgggccac caaggctcac tgactgtgta 540
 ccttgagac tgtagaccca tgcgtggcg gtaacggggc caaacacagt cattcccatg 600
 tgaacgatga aactcgag 618

<210> 1097

<211> 863

<212> DNA

<213> Homo sapiens

<400> 1097

```

gaattcgcgg ccgcgtcgac gtttcagctg gattatgggt tggattgggt catatgttag 60
actccataca ggcatagcta tgatgcagtg aatcccttag aagttacaat tctcaaatta 120
cactcttcct cagatgtaac attagaactc aatatttcta acaataacat accagaaaag 180
gctggactgg cactcatctg ctgactaact tgtagcctca gtaatatgac atactgcct 240
ttaacaaatt atctcaaatt aactaacaga ccttcagaaa atggagattc tttttgatgg 300
ggacataatc aaatttaagt ctgagaaata tgcttaacag ttggaactca aattaaatgt 360
actgatttta aagtttagac attaacagt gatagattag cctcaaaaaa agacaatttg 420
gtaaggttta ggtcttttaa tttggtgctt gttcacaaact tgactgggtgc tcttttcctt 480
gctgtcttca catcaagcca tggggccaat tctattttca gtaaatgttt gacagctttt 540
tacttagtaa cagtctcagc acttttatta agcatgcaag actaacaaaa actttggcaa 600
tgcataagtg taacacagtg acaagagagc ttttacaatt aagtcttcta atactgcctt 660
cacagtgtgg aaattgtgct acatccacca aaagagggcc ccgtctactc aaatatttcc 720
gtacttcacc ccaggaacaa actcctttgc atttggattc agattgctct tgaccacaag 780
atcttccaga gaagagccat cactgataac aaggtcatta aactggctct ggatttggtc 840
catagtttgt gggagatctc gag

```

<210> 1098

<211> 663

<212> DNA

<213> Homo sapiens

<400> 1098

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gaattcgcgg ccgcgtcgac cgcagcccca tggctggggg ttatggagtg atgggtgacg 60
atggttctcat tgattatact gtacacgaag cctggaatga agccaccaat gtttacttga 120
tagttatcct tgtagcttc ggtctcttca tgtatgcca aaggaacaaa aggagaatta 180
tgaggatatt cagtgtgcca cctacagagg aaactttgtc agagcccaac ttttatgaca 240
cgataagcaa gattcgttta agacaacaac tggaaatgta ttccatttca agaaagtacg 300
actatcagca gccacaaaac caagctgaca gtgtgcaact ctcatggaa tgaacctca 360
gaaaaagagc aacagaagta attgtttcaa gctcctgatt ctttctacta aatcatgaac 420
agctttaaaa acatttctgt ctgcataaaa ttattttact tgtaactttt cccaattgt 480
tctgtgcatt gttttgcctt tttaaattac atctccaagt ggctcaaaag gccttgacac 540
agggaaacctg cacatatcca ggatatgtgt aaccagcgat ggtgacttga ccttgccaag 600
acctgtgatt ccttcaggat acaatcagtg agaaataaaa acacatcttg ggaagtgtc 660
gag

```

<210> 1099

<211> 536

<212> DNA

<213> Homo sapiens

<400> 1099

```

gaattcgcgg ccgcgtcgac atctcgagag acataagcca catattgttt agtcaacaat 60
ctcaaatgca gtggtttttt tgacacgctc ctctgggct tttatgtata ccacagaatc 120
agccacgtta cagtttgaat taatcatttt cttcaaaagg agtcccagaa gtgaacccaa 180
acaaaaagct actatccctt tacagttgga aagtagaaga cactgggtgat gtactcagct 240
ttcatctttt atccttcgat gataaattga cccaaatgta cctctggcca ggaagaagca 300
aggaatttaa atagtactag atgtcaaaaca atactattaa aatacttcca atttgaatat 360
cacatcacag ttttgaaaat gcacttctcat ttattattgc tttgttctcc ttagtagtaa 420
aagggaacac tgagggtaca catctaggaa tcaaaactcat gtcttcta at tcttgagcta 480
tatctacttt ggtctatagc ttctaaattt gtaatagaag ctcaaaaata ctcgag 536

```

<210> 1100

<211> 586

<212> DNA

<213> Homo sapiens

<400> 1100

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gaattcgcgg ccgcgtcgac ctcagagtgc gcccaatctt ggaatcttta agggatgagc 60
cagacccaga ccgcgggcct tctagagagg gtccggcagg gaggtcggc gccctggccc 120
ggggtgggcc ggagccctgt gatgtgcat cgcgccagg aggagccagc tgtgccccag 180
agttggcgcg gccgagagag gacaagagcg cgcagcaggc gaagctggag ggcgggactc 240
gactttgttg tcgctgcccc gagaggtcga gactggtacc cggaggagct gtctcaccag 300
gagaccacgt cctggaagtg tccgggactc gcgggacctg tggctgcaga ccccgccggc 360
acgcaggccc agagctggcg cactcctgag gatgagactc tggggggccct agccggggtc 420
cacgggaggg ctgtccttgg ggactctagg atggcttcgt tctggcccg ctcacttctg 480
gagctgtgag acccaagaca aaaggggctg agggatttct cattgacaag agttcgtgcg 540
ggaaaaccac ctgacccta gggatttctc atcttggaact ctcgag 586

```

<210> 1101

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1101

```

gaattcggcc aaagaggcct aaaccgtcga ttgaattcta gacctgctgt tttgaattcc 60
tgcaaaactct ctctctcttt tttttctttt ttaaattggc gcactttgtt gcccaaggctg 120
gagtgcagtg gcacgatcat ggctgactgc agcctcaacc tcctgggttc aagggatcct 180
cccagctcag cctcccaagt agttgggact acagccgcac cactcgag 228

```

<210> 1102

<211> 905

<212> DNA

<213> Homo sapiens

<400> 1102

```

gaattcgcgg ccgcgtcgac ctacttttct tggaaatgca aaagattatg catatttctg 60
tcctcctttc tcctgtttta tggggactga tttttggtgt ctcttctaac agcatacaga 120
taggggggct atttcttagg ggcgccgac aagaatacag tgcatttcta gtagggatgg 180
ttcagtttct cacttcggag ttcagactga cccccacat cgacaatttg gaggtggcaa 240
acagcttcgc agtactaat gctttctgct ccagtttct gagaggagtc tatgctattt 300
ttggatttta tgacaagaag tctgtaata ccatcacatc attttgcgga aactcccacg 360
tctccttcct cactccagc ttcccaacag atggcacaca tccatttgtc attcagatga 420
gacccgacct caaaggagct ctccctagct tgattgaata ctatcaatgg gacaagtgtg 480
catacctcta tgacagtgc agaggcttat caacactgca agctgtgctg gattctgctg 540
ctgaaaagaa atggcaagtg actgctatca atgtgggaaa cattaacaat gacaagaaag 600
atgagatgta ccgatcactt tttcaagatc tggagttaaa aaaggaacgg cgtgtaattc 660
tggactgtga aagggataaa gtaaacgaca ttgtagacca gggtattacc attggaaaac 720
acgttaaagg gtaccactac atcattgcaa atctgggatt tactgatgga gacctattaa 780
aaatccagtt tggagggtgca aatgtctctg gatttcagat agtggaactat gatgattcgt 840
tggatatctaa atttatagaa agatgggtcaa cactggaaga aaaagaatac cctggaactc 900
tcgag 905

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<210> 1103

<211> 497

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (32)

<220>
 <221> unsure
 <222> (124)

<220>
 <221> unsure
 <222> (325)

<400> 1103
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 atcnaagaga aagaaaaatc ctgaaagagg aaaaaataaa caaccttact cagagaggaa 180
 caaagataag aattacttcc agcttttctt cagaaacat gaaagcaaga gaagagtggg 240
 gtgaaatatt taaagtgttg aggcggggca cagtgggtca cacctgtaat cccagcactt 300
 tgagaagcca agacagaaag atcanttgag atcagcctgg gcaacatggg gaaacccat 360
 ccctacaaaa aaaaaaagtt ttttaattag ctgggtatgg tgggtgcacac ctgtgggtccc 420
 agctgagtgg ccctagagtt tgtaatatatac agctaäccca agtccacttt caaataacac 480
 tataccactt cctcgag 497

<210> 1104
 <211> 683
 <212> DNA
 <213> Homo sapiens

<400> 1104
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 accctcgccct gctcgacca gccttcgag tgcacactcc tccgactacc cgctgcctcg 120
 aagtcgctcc tccagtgcct ccgcgcgctc ccggtcaccc ccacgcccac tttccacgat 180
 cgcgcgctgc ctcaaccccc ggctttcttg gcgctcgcta cccagtgggc aaccggcccg 240
 accttcggac ccgcgaggtt tctgcttagt aactcccaat cctgaaaaac tccaaccctg 300
 tggagtcccc ccataatcaa gaacggccct cagcccgca actgccgcgg aaagactctc 360
 cctgaacctt ccgggacggc acgaagcgcg ccgacccga ggtgcccagc agtgaggagc 420
 accccagtc tgaggccccc tggggcccg gtggcacgcc ccgactctgc ttggagaccc 480
 ccaacttgct tagagaggcc actgctccaa gtcttactcc ctctggggag cgccttcccc 540
 cgaccctga ggggcccgc tgcgcccagc tgggtgcacc caccttgccg cgcagaagta 600
 tctgggacgt gcagccccg ggccgcgcg gctcggcgcg cgctggggag aagttggcag 660
 aagccgccc tcaacacctc gag 683

<210> 1105
 <211> 970
 <212> DNA
 <213> Homo sapiens

<400> 1105
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 ttccaggctc caagggccg ctgcccgcgc cgccgcgccc ggccgaagg tgcgcccag 120
 cagtctccag cgcaggcttc cttaccgggc gaccacaatg tccgagtttc tcctcgcctt 180
 actcactctc tcgggattat tgccgattgc caggggtgctg accgtgggag ccgaccgaga 240
 tcagcagttg tgtgatcctg gtgaatttct ttgccacgat cacgtgactt gtgtctccca 300
 gagctggctg tgtgatggg accctgactg ccctgatgat tcagacgagt ctttagatac 360
 ctgtcccag gaggtagaaa tcaagtgcct cttgaatcac attgcttgcc ttggtagcaa 420
 caaatgtgtt catttatccc agctgtgcaa tgggtgtctg gactgcccag atgggtatga 480
 cgaaggagta cattgtcagg aactgttatc caattgcca cagctgaatt gtcagtataa 540
 atgtacaatg gtcagaaata gtacaagatg ttactgtgag gatggattcg aaataacaga 600
 agatgggaga agctgtaaag atcaagatga atgtgctgtt tatgggtacat cgagccagac 660
 ctgcagaaac acacatggat cctacacttg cagttgtgtg gaaggctacc taatgcagcc 720
 agacaacaga tcttgcaagg ctaaaaatga acctacagat agaccaccta tactattaat 780
 tgcaaatatt gaaacaattg aggttttcta tcttaattga agtaaaatgg caactctaag 840
 ctcagtcaat ggaatatgaa ttcatactct ggattttatt tataatgaag atatgatttg 900
 ttggattgaa tcaagagaat cttcaaatca actcaaatgt atccagataa caaaaacagg 960

aggactcgag

970

<210> 1106

<211> 120

<212> DNA

<213> Homo sapiens

<400> 1106

gaattcggcc aaagaggcct acgagaggcg tgtgagtaaa aaggaacagg acagcatcgc 60
aattcggctgt taagggtgctt ttgaaaaaaa aaattatttc gaggatggtt gctcatgcag 120

<210> 1107

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1107

gaattcggcc aaagaggcct actggatttg gactaaagaa aaaaggaaaag gctagcagtc 60
atccaaaaga atcatgagac agactttgcc ttgtatctac ttttgggggg gccttttgcc 120
ctttgggatg ctgtgtgcat cctccaccac caagtgcact gttagccatg aagttgctga 180
ctgcagccac ctgaagttga ctcagggtacc cgatgatcta cccacaaaca taacagtgtt 240
gaaccttacc cataatcaac tcagaagatt accagccgcc aacttcacaa ggtatagcca 300
gctaactagc ttggatgtag gatttaacac catctcaaaa ctggagccag aattgtgcca 360
gaaacttccc atgttaaaaag ttttgaacct ccagcacaat gagctatctc aactttctga 420
taaaaccttt gccttctgca cgaatttgac tgaactccat ctcatgtcca actcaatcca 480
gaaaattaaa aataatccct ttgtcaagca gaagaattta atcacattag atccactcga 540
g 541

<210> 1108

<211> 950

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (316)

<220>

<221> unsure

<222> (412)

<220>

<221> unsure

<222> (431)

<220>

<221> unsure

<222> (463)

<220>

<221> unsure

<222> (492)

<400> 1108

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ctactgattg tgatatattt ttttgcagag taacagctat ccaccaatgt cagatccata 120
catgcctagt tactatgctc catccattgg atttccatat tctcttgggg aagcagcgtg 180
gtccacagct ggagaccagc ctatgccata tctgacaacc tatggacaaa tgagtaatgg 240
agaacatcac tatataccag atgggtgtatt tagtcaacct ggggcattag gaaatacccc 300
tccatttctt ggtcancatg gatttaactt ttttctggtt aatgctgatt tctctacatg 360

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ggggacaagt ggatctcagg gacaatcaac acaaagtctt gcttatagta gnagttatgg 420
ctatccacct ngttctcttg ggagagctat tactgatgga cangctggga ttgggcaatg 480
atacttttag tnaggtgcct ggcattagca gtattgagca aggcattgact ggactgaaaa 540
ttgggtggtga cctgacagct gcagtgcaca aaactgtagg tacagctttg agcagcagtg 600
gtatgactag cattgcaacc aatagtgtgc cccaggttag cagtgcagca cctaaaacca 660
cctcctgggc tgcattgcc agaaagcctg ccaaacctca accgaaactt aaaccaagg 720
gcaatgtggg aattgggggt tctgctgtac caccacctcc tataaaacac aacatgaata 780
ttggaacttg ggatgaaaaa gggtcagtgg taaaggctcc accaacccaa ccagttctgc 840
ctcctcaaac tataatccag cagcctcagc cattaattca accaccacca ttggtgcaaa 900
gcaactgcc tcaacagcag cctcaaccac cacaaccaca tcagctcgag 950

```

<210> 1109

<211> 627

<212> DNA

<213> Homo sapiens

<400> 1109

```

gaattcggcc aaagaggcct acaggggaaa agtaagctcc tccaaagttg cttgcagtgc 60
tggaataaga tctcattttt aggttttctc ttcgttccag ataccataa aatgggacag 120
agaataaaat ttttgttaaa atatgtgtc atctcctaag tagctcttca gagctcgacc 180
gtaagtaaaa acacacagaa ttgtgttcag tggggggagt gaatcacaaa aaagttacga 240
ggagtttaag agtcaaatat tatttgatcg tggctgtcaa atttagtgaa caacatagat 300
tggatttggg gttggtagta ggtatggttc tcataccaga attctcttaa aaaaaaaaaa 360
aaaggacaat tgggaattgcc ttattttatt ttaaaatcaa tgcttactag ttggtaggat 420
tcccaggtca gcagcagggg tgattaaata atcttgacaa tgagcagctg ccattctggg 480
ggatttcatt ctgtggtttt ttaaatgttt cgtctttgat gctaccatcc agggcttctt 540
attgtgacct tgtagcctat tttgttctcg ctgttctcta acatggtgca gttcacgcag 600
actggtttag gtacttcccc actcgag 627

```

<210> 1110

<211> 844

<212> DNA

<213> Homo sapiens

<400> 1110

```

gaattcggcc aaagaggcct agatcgcaga tcataaagca agctctgctt tagtttccaa 60
gaagattaca aagaatttag agatgtattt gtcaagattc ctgtcgattc atgccctttg 120
ggttacggtg tctcagtgga tgcagcccta ccttttggtt tggggacatt atgatttgtg 180
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agaccctcct gagacgttct gtgcaatggg caatccctac atgtgcaata atgagtgtga 360
tgcgagtacc cctgagctgg cacaccccc tgagctgatg tttgattttg aagggaagaca 420
tccctccaca ttttggcagt ctgccacttg gaaggagtat cccaagcctc tccagggtta 480
catcactctg tcttggagca aaaccattga gctaacagac aacatagtta ttacctttga 540
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gccctatcag tattatgcc aagactgctt agatgctttt cacatggatc ctaaatccgt 660
gaaggattta tcacagcata cggctctaga aatcatttgc acagaagagt actcaacagg 720
gtacacaaca aatagcaaaa taatccactt tgaaatcaaa gacaggttcg cgttttttgc 780
tggacctcgc ctacgcaata tggcttccct ctacggacag ctggatataa ccaagaaact 840
cgag 844

```

<210> 1111

<211> 832

<212> DNA

<213> Homo sapiens

<400> 1111

```

gaattcggcc aaagaggcct agttgtgtcc ttcagcaaaa cagtggattt aaatctcctt 60
gcacaagctt gagagcaaca caatctatca ggaaagaaag aaagaaaaaa accgaacctg 120
acaaaaaaga agaaaaagaa gaagaaaaaa aatcatgaaa accatccagc caaaaatgca 180

```

```

caattctatc tcttgggcaa tcttcacggg gctggctgct ctgtgtctct tccaaggagt 240
gcccggtgcgc agcggagatg ccaccttccc caaagctatg gacaacgtga cgggccggca 300
gggggagagc gccacctca ggtgcactat tgacaaccgg gtcaccggg tggcctggct 360
aaaccgcagc accatcctct atgctgggaa tgacaagtgg tgcctggatc ctgcgtgggt 420
ccttctgagc aacacccaaa cgcagtagac catcgagatc cagaacgtgg atgtgtatga 480
cgagggccct tacacctgct cgggtgcagac agacaaccac ccaaagacct ctagggtcca 540
cctcattgtg caagtatctc ccaaaattgt agagatttct tcagatatct ccattaatga 600
agggaacaat attagctca cctgcatagc aattggtaga ccagagccta cggttacttg 660
gagacacatc tctcccaaag cgggttggtt tgtgagtga gacgaatact tggaaattca 720
gggcatcacc cgggagcagt caggggacta cgagtgcagt gcctccaatg acgtggccgc 780
gcccggtgta cggagagtaa aggtcaccgt gaactatcca ccatacctcg ag 832

```

<210> 1112

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1112

```

gatggagccc agcaccgcgg cccgggcttg ggcctctttt tggttgctgc tgcccttget 60
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ggagactcat tcgcttttct tccggagcct gaaggaccgg ggctttgagc tcacattcaa 180
gaccgctgat gacccagcgc tgtctctcat aaagtatggg gaattcctct atgacaatct 240
catcattttc tccccttcgg tagaagattt tggaggcaac atcaacgtgg agaccatcag 300
tgcctttatt gacggcggag gcagtgtgct ggtagctgcc agctccgaca ttggtgacct 360
tcttcgagag ctgggcagtg agtgcgggat tgagtttgac gaggagaaaa cggctgtcat 420
tgaccatcac aactatgaca tctcagacct tggccagcaa ctcgag 466

```

<210> 1113

<211> 668

<212> DNA

<213> Homo sapiens

<400> 1113

```

gaattcggcc aaagaggcct aagcagagca gaatgcaggg gttactgtgt tgaacaaaag 60
gcacacatca gagagacagt tgcaaaactca gaatactgcy ttatgggcaa aactaactgg 120
tccacaagag aaaatgagag actcgatttg gctgccagga acacctgggc ctaggcaaga 180
acacaagagg tttctggggg tggggaggaa ataggtctcg ctgaaggtga cagatccctt 240
ggggggcgcc cagctgtctg gatcactgtc cagggactgt ggccagccca gatacctcgg 300
aggtgagtc agatcactag gacgagcagt ctgtcgggtg gatgcgatgg atggcgatgg 360
ctgtggcagc gcagggtctg gggcagaatg atgtagtctg ctggcagctt ggtggggagg 420
agagggcttg gcagcggcgg cagtgggtgg tctgtccagt gtgtaacagg agcccagctt 480
gcagctggag cgcaggacag cgtccaaatg tacatgggag gggctggctg gctggaagga 540
gagggcgggc gctcgctcca gagtgaggcc caggggcggc agcaggagcc tggagcgcta 600
ttcctggaac aaaggcaagc actacgcggg agggaaacagg agcgcagggg acatcgcgcc 660
ggctcgag
668

```

<210> 1114

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1114

```

gaattcggcc aaagaggcct agttgaatgt atatatcaag gcttaaaatc ctcatcttgg 60
ttgcaacaga atagtgttta taagtttatg atttgggagc caatgaaaat agtgtcattt 120
ttccctgtga gaataaaagc tcaaggtagt gtcaagtctt cagaaagtaa acttagcaca 180
gtgggtctca aactctgcag tgcgttaaaa ctacagattt ttggggcctg gcccgaagat 240
tctgcccacg taggtctggg gggtagccca gggatgtttg ttttaacaa gcactgcagg 300
tgattttttt tgtttttact tttatttttt tcttgagcaa ctttgagtcg aaagcagatg 360
atttttagta aatgatattt gcactacagc tcgag 395

```

<210> 1115
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (461)

<220>
<221> unsure
<222> (573)

<220>
<221> unsure
<222> (578)

<220>
<221> unsure
<222> (590)

<400> 1115
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gctcaattct gctgacttga tatattactt tagattttaga gaatcccaag ggatagctct 180
ctggatatta tgtaattaa tagtctttgc cccctctcct cttctattag gtaggaaaac 240
atthttctaga gaatagaaa agtcctctc ataacctggt gttttccct ctcggttatg 300
tattagataa ttagataaat tggaccttat aatctatctg ttaagttcct gttataccta 360
gattatatct tggttcttct gcttgaatct caacatcaca tatttgcca tttaaagtcc 420
tttcaaaactg agctcttttg caaacagctt cctatgcagg naaccagagt tatttactag 480
gtccttaaca tgaatcccca aattttatth tagatgatac tgaatttttg tgcctttgcy 540
aaagtcatgt taaatatgtt aaaaccatac cgnaaagntt aacacacacn tacacccaaa 600
aaaaaacct actaaaaaa ataccctaaag aaaaactcat aataccaggg cactcgag 658

<210> 1116
<211> 559
<212> DNA
<213> Homo sapiens

<400> 1116
gaattcggcc aaagaggcct atagacctgt ctgaggcgag gtctagaatt caatcgacgc 60
cgccatgggt aacctgttcg gccgcaagaa gcagagccgc gtcacggagc aggacaaggc 120
catcctgcaa ctgaagcagc agcgggacaa gctgaggcag taccagaaga ggatcgccca 180
gcagctggag cgcgagcgcg ccttgcccg gcagctgctg cgggacggca ggaaggaacg 240
ggccaagctg ctgctcaaga agaagcgata ccaggagcag ctcttgga caacggagaa 300
ccagatcagc agcctggagg ccatgggtca gaggattgag ttcaccaga tcgaaatgaa 360
agtgatggag gggctgcagt ttggaaatga gtgtctgaac aagatgcacc aggtgatgtc 420
cattgaagag gtggagagga tcctggacga gacgcaggag gccgtggagt accagcgga 480
aatagacgag ctcttgccag gaagcttcac tcaggaggat gaagacgcca tcctggagga 540
gctgagcgca acactcgag 559

<210> 1117
<211> 486
<212> DNA
<213> Homo sapiens

<400> 1117
gaattcggcg ccgcgtcgac aaatctactg tctgtcactt ggatgttgat gtggctatag 60
ttagttcatg tttgttaaat gactacaact gggaaattat gtctactgtc cttttgtaca 120
agttcaaaag atgacagcca cccatctaaa aatctgag cctatagaag atgcatgagg 180

```

agtcacctgtc cccagggtta ccacttatgc ttcttattag gatggcttgc tatacatagc 240
acctaatagt agtttcttct cttttctctt ttgcataatg gatcacagtc accttctata 300
tagcaccatc cccaggatgc aggagccggg gcagattgtg gagacctaca cggaggagga 360
tcctgaggga gccatgtctg tagtctctgt ggagacctca gatgatggga ccactcggcg 420
cacagagacc acgggtcaaga aagtagtgaa gactgtgaca acacggacag tacagccgtc 480
ctcgag                                         486

```

<210> 1118

<211> 903

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (325)

<220>

<221> unsure

<222> (334)

<220>

<221> unsure

<222> (345)

<400> 1118

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atagaagaca aacaagggaa ggtttttttt ccttttgcac catggctcaa tttggaggac 120
agaagaatcc gccatgggct actcagttta cagccactgc agtatcacag ccagctgcac 180
tggtgtttca acagccatca ctccctggag catctcctac catttataca cagcaaaactg 240
cattggcagc agcaggcctt accacacaaa ctccagcaaa ctatcagtta acacaaactg 300
ctgcattgca gcaacaagcc gcagntgcag cagntgcatt acaancagca atattcacia 360
cctcagcagg cctgttatag tgtgcaacaa cagttacagc aaccccagca aacctcttta 420
acacagccag ctgttgact gcctacaagc cttagcctgt ctactcctca gccaacagca 480
caaataactg tatcatatcc aacaccaagg tccagtcaac agcaaaccca gcctcagaag 540
cagcgtgttt tcacaggggt ggttacaaaa ctacatgata catttggatt tgtggatgaa 600
gatgtattct ttcagcttag tgcgtgcaaa gggaaaaccc cccaagtagg tgacagagta 660
ttggttgaag ctacttataa tcctaataatg ccttttaaat ggaatgcaca gagaattcaa 720
acactaccaa atcagaatca gtcgcaaac cagccattac tgaagactcc tcctgctgta 780
cttcagccaa ttgcaccaca gacaacattt ggtgttcaga ctacgcccc gcccagtc 840
ctgctgcagg cacagatttc agcagcttct attacaccac tattgcagac tcaaccactc 900
gag                                         903

```

<210> 1119

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 1119

```

gaattcggcc aaagaggcct actgacttct ggtcttggag aaaatgcttg tgtaaagaaa 60
agtcattgaaa agtaccttat agctttaaag agctctggac ttacatatcc tgaggataag 120
cttgatatag gtgtgcagga gccatctgct ggtactagtt ctctggctgt tcaaggtttc 180
ataggcgcaa caggaacttt gggacaagtg gattcttcag atgaggatga tcaggatggt 240
agtcaaggtc tgggcaagag aaaaagggtg aaactaagca gtggcaccaa agatcaatcc 300
ataatggatg ttttgaagca taaaagcttc ctagaagaac tattattttg gactataaaa 360
tatgaattcc ctcaaaagat ggtaactttc ttactcaaca tgcttccaga tcaagagtat 420
aagggttgctt ttacaaaaac ttttgttcag cattatgctt tcattatgaa aacactgaag 480
aaaagtcatg aatcagacac aatgtctaac agaattgtgc atattagtgt tcagttgttc 540
agcaatgagg agctagccag acaggtaaca gaagaatgtc agctgctgga tattatggtc 600
actgtgctat tatcatgat ggaagattgc cttattaaaa gtgagctaca agatgaagaa 660
aatagtttac atgtggtagt gaactgtgga gaagcattac tgaagaataa cacttactgg 720

```



```

cctcttgtta gtgattttat taatattctt tctcatcaaa gtgtggccaa gagatttttg 780
gaggatcacg gtttgtagt tacatggatg aactttgtat ctttctttca aggtatgaac 840
ttaaacaagc gagaactaaa cgagcatgtg gaatttgagt ctcagacctt ctatgctgcc 900
tttgctgctg aacttgaggc ctgtgcacag ccaatgtggg ggcttttctc acattgtaaa 960
gttagggaaa ctcaagagta taccgaaat gttgttagat attgccttat agctcgag 1018

```

```

<210> 1120
<211> 452
<212> DNA
<213> Homo sapiens

```

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<220>
<221> unsure
<222> (65)

```

```

<220>
<221> unsure
<222> (71)

```

```

<220>
<221> unsure
<222> (348)

```

```

<220>
<221> unsure
<222> (387)

```

```

<220>
<221> unsure
<222> (440)..(441)

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```

<400> 1120
gaattcggcc aaagaggcct agagggcact tctaaacatc tagatagtct aaatgtttca 60
agtanggagt naatttgtcc actatgtatg tacacagcag tctcgaataa actgcaaaca 120
tgtaacaaca gttataatct gaaagagtct tccaaatgtg aacattctgg cctagaaccc 180
ttcccatctc catcaaccca gtgggcaaga atgctcaaat ttccagaaga cagtctttcc 240
taggacttgt aaaacaaaat gtacaaaata tattagttta ctaactctag tttgtttata 300
cactggcaac ctctttaaca tccagaaaaga ctagatgttg taaattanga ctcgtttgc 360
ctttatgtac attatataca tagatanaac aaaatgcaca gacatagtga ttcactctgc 420
ctcgctgtaa gcaggatggn ntaaagctcg ag 452

```

```

<210> 1121
<211> 427
<212> DNA
<213> Homo sapiens

```

```

<400> 1121
gaattcggcc aaagaggcct actcacctat cacttcaaag gggtaaaaat actcttctgc 60
tcaaactgta ttcagtctct cgtgtcaatg gaaaatgggtg tggtacagat agaaaattct 120
aaagaagatc tcacatttca aaattaatac ctaattttac tcagtaatta catcttattt 180
caaacatagc cccttacaat tagtcttgaa ttgaaatcta agtttcataa ctctgggta 240
agatgaccat ttagtaaaact gcctaccaat ttagttttac ttatctgtta agcaccatag 300
tatttatgat ctatataaga ttgtaatgaa aactacattt ttgtaaaaca ccatacatag 360
tgctcagtat gttcttccct cctgccattt cttatatctt ttgattaata cctttaaata 420
actcgag 427

```

```

<210> 1122
<211> 453
<212> DNA
<213> Homo sapiens

```

<400> 1122
gaattcggcc aaagaggcct atccagggtta aggtatccag cctttatcat ataagcattg 60
acattatcca ggcctagtca gtacagtagt ggtaacggga ttgaaaaaga ttgatggag 120
aggaaaagtat ctaatattag tcatgggtttt gacctaaatt gctagacagt cgtgccattc 180
acaaagtcag aaaatacagc aggaagagac agcttttaga ggggcagaga attagaggat 240
ggtggttagta atgaaaatga tgcattcagt ttaacaagtt taatttgaga cagctatggg 300
atagctaaaa acaaaagccc ataaagttgg agatagggac cagagtttaa catagcgatc 360
tagggcagaa ttgacaatgt ttaagtaatg gtggaatctg tcaataagac ttcccagagt 420
gttaatatat atcagaaatg cacccaactc gag 453

<210> 1123
<211> 709
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (22)

<400> 1123
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gaaattgccc accttagtaa catcatcaat aaactactaa aggacaaaaa tgagttccac 120
aaacatgttg agtttgattt ccttattaag ggccagtttc tgcgaatgcc cttggacaaa 180
cacatggaaa tggagaacat ctcatcagaa gaagttgttg aaatagaata cgtggagaa 240
tatactgcac cccagccaga gcaatgcatg ttccatgatg actggatcag ttcaattaaa 300
ggggcagagg aatggatctt gactggttct tatgataaga ctctcggat ctggtccttg 360
gaaggaaaagt caataatgac aattgtggga catacggatg ttgtaaaaga tgtggcctgg 420
gtgaaaaaag atagtttgc ctgcttatta ttgagtgtt ctatggatca gactattctc 480
ctatgggagt ggaatgtaga gagaaacaaa gtgaaagccc tacactgctg tagagggtcat 540
gctggaagt tagattctat agctgttgat ggctcaggaa ctaaattttg cagtggctcc 600
tgggataaga tgctaaagat ctggtctaca gtccctacag atgaagaaga tgaaatggag 660
gagtcacaa atcgaccaag aaagaaacag aagacagaac aggtctcgag 709

<210> 1124
<211> 135
<212> DNA
<213> Homo sapiens

<400> 1124
gaattcggcc aaagaggcct agtgggggga ttgcaaatga aggaactttt tacatggatc 60
tttttaattc cagtgtgtg ggggaggggg gtacttggtt cttgggtcac acaagctcta 120
tcccaacatc tcgag 135

<210> 1125
<211> 899
<212> DNA
<213> Homo sapiens

<400> 1125
gaattcggcc aaagaggcct atcagatttc tagcaaaatt gaacagaaag tatagagtgt 60
acattctgta tctcctgacc ccgtacatgc acagcctccc ccactatcag cgtcctcccc 120
cagagtggat ttgttaaaat tgaagaccct acactgatac agcatcatca cccaaagtcc 180
atagttttca ttagagttaa ttctgtgtgt tgtgcattct atcagtttga caaatatgta 240
atcacatgca tctgccatta tagtgtcata cagaatagtt ttactattct aaaatcctct 300
gtgccccacc tattcatctc ttcttctctc ttaacccttg gcaccactgg tcttttctact 360
atcttcatag ttttaccctt tccagaatgt cttatagtta gaatcatata gtatgtagcc 420
ttttcagatt ggcttctttg atttagtaat aagcatttat gttttcttca tgtcttttca 480
tggcttgata gtcattttct ttttagtgct gaataataat ttattgtttg catataccaa 540
agtttatcca ttcacctact gagggatata ttgattgctt caaagtttcg gcaattatga 600
ataaagcttc tgtaaagatt catatgcaga tttctgtgtg aacacaagtt ttcaaccat 660

ttgggtaaat accaatgaga gtgatagcta gatcattgtg gaaagctttt aaaccacaaa 720
 tttagtttct ctaactattc agtttatctg tttctttttt agtgagtttt ggttgtgttt 780
 ttcataggagc ctgtgcattt tatctgagtt gttaaattta tttccatgaa gttgttcata 840
 atattccctt tttattcttt taatatctat aggatctgtc atgatgtccc gagctcgag 899

<210> 1126

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1126

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 tgctgccagt cctgcctgaa aacgcgaaat gagtcttgct tggttctccc tccactgggc 120
 gtgagagccc ctgcccagga ggcccaggac aaatggcccc atagtggaaa ctgggaagct 180
 tttaggcatc tgatcagagc gggagccagc cgggggacca cagtgtgga caggccaacc 240
 aactcaaact tgaagacatg aaatcccaa ggagaaccac tttgtgcctc atgtttattg 300
 tgattttattc ttccaaagct gcaactgaact ggaattacga gtctactatt catcctttgg 360
 aaaaaaacc tgaagctcag cgaggataag taacttcccc aaggtcacaa agccacagaa 420
 gtcttcattga acatgaacca gctcgag 447

<210> 1127

<211> 449

<212> DNA

<213> Homo sapiens

<400> 1127

gaattcggcc aaagaggcct aaacttcgta aaaagctaaa ggcagaaaag aagaaattag 60
 ctgctcttat gtcttccccg caaagcagaa cagttcgaag tgaaaatcta gaacaggtgc 120
 ccaggatgg gtctccaaat gattgtgaat caatagagga cttgttaaat gagctaccat 180
 atccaattga tattgccaat gagtctgcat gcaccactgt tcctgggtgtt tccctgtaca 240
 gtagtcaaac tcatgaagaa attttagcgg aattattgtc tcctacacct gtttcaacag 300
 agctgtcaga aaatggggaa ggtgacttta ggtatttggg aatgggagat agtcatatcc 360
 caccaccagt accaagtgaa ttcaatgatg tttcccagaa cacacatctg agacaggacc 420
 ataattattg tagccccacc ggactcgag 449

<210> 1128

<211> 278

<212> DNA

<213> Homo sapiens

<400> 1128

gaattcgggc caaagaggcc taagattaac tatactattt tcaagggcaa atagttatcc 60
 tttatgacat ttctgttttc ctaacaccta acagaaatgt gctcttccat ggaatagata 120
 ttttaacat tatttatttg taacattttt agttattttt taaaaaatag atgatttatt 180
 tacaagtcag gaaatcctag taaaaatgct cccatccttg tcttcaatct actactcagt 240
 ttctaattgct cctcctgtag ataaccactg tactcgag 278

<210> 1129

<211> 305

<212> DNA

<213> Homo sapiens

<400> 1129

gaattcggcc aaagaggcct acacatttgg ggccacacac tatgtccatc tttccctctt 60
 tgggtgatgtt aatttatcac ccaatcaaga tataagtcca tttctccacc gtgtaattgc 120
 tgttttattt tttcgttgca actaacaagc agtctgtgac aagatagttc aagaccatct 180
 tagcatccag ctgcagaccc acttttgact ctagtataat agatggccac ctgtttgcat 240
 gatttcagga gcacaagaaa ggcacaaagc ttctggaata aagatatatc ccctcttccc 300
 tcgag 305

<210> 1130

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1130

```

gaattcggcc aaagaggcct atccaaggac caccacccgc caccgcccgc cgagcgctact 60
attgcggccg cctctgctg cgcctgaaga gagaggcgac tctacaagcc tcacagcatg 120
cactgttact aaaaagacga tgcgtcctcc tggacctgag atctgtgtga tcgtgggaaa 180
gcgacgaaaa acgaacaaaag gaacagtaaa tggagtaact tggctagaat atggcagtaa 240
ctacaaggca tgttctgctc tggcacgaag acaaccacc tgaggcacca gacacatgag 300
tgaagccatc ttggacatcc cagtcacagc caaactcact cctgagtgcg cctgcatgat 360
gaacccagca atccccactc tcgag                                     385

```

<210> 1131

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1131

```

gaattcggcc aaagaggcct aaaagcaggg actaaaagcc ccacttcgtc ttacgttccg 60
aaaggaaggc gtctgttgag cctttctctc agtcgtgagg gaggcgtcga cggcgtgcgg 120
aagtcctgag ttgaggcttg cgggacctt tccggagaaa gcgcaggcta aagccgcagg 180
tgaagatgtc caactacgtg aacgacaagt ggcggggctc gccgcaggag aaggattcgc 240
cctcgacctc gcggtcgggc ggtccagcc ggctgtcgtc gcggtctagg agccgctctt 300
ttccagaag ctctcgggtc cattcccgcg tctcgag                                     337

```

<210> 1132

<211> 459

<212> DNA

<213> Homo sapiens

<400> 1132

```

gaattcggcc aaagaggcct aaggaggggc aggagaacac actgggtcca tgctgggtgt 60
gggcaggagc acctttccag cattaggggt gctgggatcc acataggcct gcattgggata 120
acctgggtgg taaccagcaa agggatgatg cggggcatta taaccaagag agtcataggg 180
cagtgggtgat gtcattccca ggttctgcat ctggttctgt tgtttctgag cctcccgttg 240
agccacctct tgctcaaaca acttccggcg ttcctctgta gaaagttat tgccgtcttt 300
aattcgtaact ttcttttttag aagttgggtg atcatatctg tcatctggcc tttttgttcc 360
ccgctcatag gcagaagagg gtgggtgagag ggagcttctt cggttctctt tctctttatt 420
ttgagtttgc ttgtctgggt ctctctctct tccctcgag                                     459

```

<210> 1133

<211> 681

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (154)

<400> 1133

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gaattcggcc aaagaggcct agggcaggga agctatgttg aggagggacc cccccaccac 60
atttccagca gtggaggggt gatcatttcc cactctgggc agtgggggtg tgggcatctg 120
tgggcaccca tggaccaagg agctctgccc caanctttgc ttggcccag gcccattgaa 180
gaagccttga gccctgccag accacctgcc tggttccctg cagtcttccc ccaagcactc 240
tctgctaagg cagtccctc cttgataacc cagccctgc tttcccaagg aagtagcctg 300
ccccagatga ccccgccctc ctcagggcct gggggaaaat gctgaagaca gtgccacgag 360
gccactctgc caggcgtctc tcccctgcat ttcccagccc tcccagggtc agccccagag 420
agttgtttcc accaggggac tcttggtcct caggccctc ctgtgtcctg cgaagggcct 480

```

gtccctggaga cagcctgtgc cctccgtcac cacagcctta ggctcaggcc accaggatgt 540
ttctttggcc tctggcagcc ccagctgggg tgcccctagt ccacccaaca catgcacaac 600
acacatgtac tcaacacaca catctacata taccacaacac atgtacacaa tacgtacact 660
caatatacaa cacacctcga g 681

<210> 1134
<211> 299
<212> DNA
<213> Homo sapiens

<400> 1134
gaattcggcc aaagaggcct aggtgggtgt agcagctgaa ggatcttctg tgaggctaac 60
tgctttccaa ctctcttggt cttacaccac ccgcgcactg tgtgcttgcc acacgccatg 120
acgtattcac tcttctgggt tttcccagga accacttcaa acttgataga cgtgtcacc 180
atcccattgt tctttttaag gcactcgtgg aggatctgat atggagacaa cagcccagcc 240
ttgctgggtca gctcgtagac ccgcgagtc tcgatgctga tgtgggttaa atactcgag 299

<210> 1135
<211> 606
<212> DNA
<213> Homo sapiens

<400> 1135
gaattcggcc aaagaggcct cctaaaccgt cgattgaatt ctagacctgc ctgagcggc 60
taagtgtagg atcttgtact ccgtgttgca gattactatt tttttacacc atacgtgat 120
ccagccacat ggccagaaga tgacatcttc cgacaagcta ttagtcttct gattgtaaca 180
aatgttggtg cttacatcct ttatttcttc tgtgcaacac tgagctatta ttttgtcttc 240
gatcatgcat taatgaaaca tccacaattt ttaaagaatc aagtcctgc agagattaag 300
tttactgtcc aggcattgcc atggataagt attcttactg ttgcactgtt cttgctggag 360
ataagagggt acagcaaatt acatgatgac ctaggagagt ttccatatgg attgtttgaa 420
cttgctgcta gtataatata ttctctcttt ttcactgaca tgttcatcta ctggattcac 480
agaggccttc atcatagact ggtatataag cgcctacata aacctcacca catttggaag 540
attcctactc catttgcaag tcatgctttt caccctattg atggctttct tcagagtcta 600
ctcgag 606

<210> 1136
<211> 469
<212> DNA
<213> Homo sapiens

<400> 1136
gaattcggcc aaagaggcct agctagggtg tggcagccag tggctgggtc ttgggcagga 60
gatccttggt actggtatct ttatctctgg taggactgga ataggggctg gggcagggtga 120
cctggctgaa tgtggaaaag aggactgtgt acagagggtca cccctgtggc tagctgagaa 180
gagtggaaaag gagaggtgaa gtgctaaaac tggggtcggg gagaagcctc aggtatggag 240
gaggatgggg cctctgcgaa gatgtgggtg ttaacagcca tgaggcttta gagctggaga 300
gacctgtctt cctgaatggg gtcttgggca gctcccttcc ctgctccgag cctcaatttc 360
cccatttgta aaataggggg gatgtccct acttcataag gctgcttggt gggcagaaaag 420
ataaacaggg tcggggcccc tccaagcggc tgggcgaagt gaactcgag 469

<210> 1137
<211> 113
<212> DNA
<213> Homo sapiens

<400> 1137
gaattcggcc aaagaggcct acagctacct ttatcctcat ctcccaccgt ctcccttctt 60
atctggcttt ttctagtttc caactccttc catgaagcat gtccccgctc gag 113

<210> 1138

<211> 575
 <212> DNA
 <213> Homo sapiens

<400> 1138
 gaattcggcc aaagaggcct acccagagtg acggcatgtg gaggcgtcaa tgcattctacc 60
 tccagcacac caggcatgat gtcagggtgca gcaggaggta cctggccctt tgctacacag 120
 accacatggt cttgctgggg acaagaccta gggaacagct ctttttggtg cagtgtggtt 180
 ggttcctgga gaggagagg gaatagccca cgggctaagc agcccactgc aggtacctaa 240
 tgcaaccagg aaggtcaggg aaggagatgg ccagccacgc ggtggagtgt gaacatcatg 300
 tagcagttag ccaggtgaag aggagatgct ggggagacag ggagaggcca ctccctggctg 360
 agggacctgt acctgcaaag actctcaggg gaggaggacg gctttctgtc actgtttctg 420
 tgtgtgaggg aaatcagagg gtagggcccg ctgtcccctg cctttcctgt ggggcctgac 480
 tgcacgtacc cctctctccc aaacctcca ggagttctga gtctctacct ggatcttgat 540
 tccactggca tgaaatctgt gaatctcacc tcgag 575

<210> 1139
 <211> 113
 <212> DNA
 <213> Homo sapiens

<400> 1139
 gaattcggcc aaagaggcct actagaatat taaatatact cagtaaattc tgtgaccttt 60
 gcaaaagtca aataaatttc aaatagttat ttcaaaaaat gggcactctc gag 113

<210> 1140
 <211> 108
 <212> DNA
 <213> Homo sapiens

<400> 1140
 gaattcggcc aaagaggcct agttgttggg agtggtggtg gtagtgggat gtgtgtgttt 60
 gtgttggaag tgctaagaaa cacacacaca cacacacag gactcgag 108

<210> 1141
 <211> 236
 <212> DNA
 <213> Homo sapiens

<400> 1141
 gaattcggcc aaagaggcct acgttttctt agtttaaaaa acaagtgaag agagacatta 60
 tttgtgttct cactaaattg catttttgca ttccatcaa ggcagctagc ttgacagaat 120
 ttactccagg caccgtgcag tgcacacttt tatgtttggt gacacctttc aaattactaa 180
 cttatgggag aggtgcagtg gtcacgcct gtaatcctcc cagcaccatt ctcgag 236

<210> 1142
 <211> 520
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (56)

<400> 1142
 gaattcggcc aaagaggcct ataggcctct ttggccgaat tcggccaaag aggccnagtg 60
 aagtggacag gttgaggtgg tcttctctatt cgtcattcac tcttatttgc aggttctgtt 120
 tcatgtactt ggacgtcttt tagcctctca cacttgaaa ttctagtgtg aaaaagtgtg 180
 ctctgaagtc tcacgcactc aactcgtttg acgaactcgt ttgacgtgtt ctctcttgcc 240
 ctttgtgtgtc tgtgtcttgg agtctcatag aatagggttg aacctttcac tgtcggtttt 300

```

gtaggagtca ctgaggatat tgacgaggca agtgacaggg tcgacactct tctagagagg 360
ctgtatagca accagggtgc tgaaggatta gaggtctggg aaagagtggg aaagcagtta 420
gtaggctagg gtatttctgc gtgaggctgag gagactcaga gctaggggag acattagagc 480
agggggtggc aaacattttt tgtaaagggc cgtactcgag 520

```

```

<210> 1143
<211> 706
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (28)

```

```

<220>
<221> unsure
<222> (396)

```

```

<400> 1143
gaattcggcc aaagaggcct aagatcancg tgcggggtgt gaagataggc gtcaaggccg 60
atgactccca ggaggccaag gtgacttctt ccaaccacgc ccttctcttc catggcccca 120
agctctcccc caagacttgc gatgaagagg ccatctcctg tcaccctcac tgcaggccag 180
gtgaccgccc tcttgcctct tttctccctc ctgtagggga ataatgtag ccactttttc 240
cagttaaaaa acatctcttt ctgctgatat catccaaaga acaacaagta agtgggggtg 300
ggatggcagt ggaggaggca cgggtgggtct gcagccttga ggtgggtggg tgtgggccga 360
gcccccgctc cagcacagac agacctgtcc ctgcangtac tttgggttca tcaccaagca 420
ccccgccgac caccggtttg cctgccacgt ctttgtgtct gaagactcca ccaaagccct 480
ggcagagtcc gtggggagag cattccagca gttctacaag cagtttgtgg agtacacctg 540
ccccacagaa gatattctacc tggagtagct gtgcagcccc gccctctgcg tccccagcc 600
ctcaggccag tgccaggaca gctggctgct gacaggatgt ggcactgctt gaggaggggc 660
acctgccacc gccagaggac aaggaaagtgg gacggccgaa ctcgag 706

```

```

<210> 1144
<211> 290
<212> DNA
<213> Homo sapiens

```

```

<400> 1144
gaattcggcc aaagaggcct acgagaatgt ggggcacgaa ggttgagctt ggtgatgtgg 60
tgactataat aaccttctgt gttgttgtgt ttgtgtctg tgttgatggt ttagtgaagg 120
ttatttttac aggagacatg tggggtggta aggagtggc aatgctctgc atgatgttgc 180
tcattcttgg actaccactc acaggcacag tgatcgtctt tgagactgga acaacggcct 240
ttggaacttc ctttagaaca acaggagagg agctggagag gcagctcgag 290

```

```

<210> 1145
<211> 146
<212> DNA
<213> Homo sapiens

```

```

<400> 1145
gaattcggcc aaagaggcct acgagggtag ggaataaaga actacagaga gctcaagaac 60
aattaggcaa ggagatgaga atgaatatgg aaaatctagt taggaatgaa gatattctac 120
attcagagga agcaacgtcc ctcgag 146

```

```

<210> 1146
<211> 721
<212> DNA
<213> Homo sapiens

```

```

<220>

```

<221> unsure

<222> (9)

<400> 1146

```

gaattcggnc aaagaggcct aggttttttc agggtagcag tttattattt atttccatac 60
tttgtgtttt atcccatcaa tctgctcttt caatttggct tagagttata gaatgttcga 120
gctggagaaa ccacattttc tgagaaacat tttatataaa ttctgataac agttgtatga 180
acttctattt cttcaagaat catgataagt tttatcataat aggtcccaag aaaaatctag 240
gtacagtaac aactggagat caggaaatatt ttctaaata ttcttgcac tgtactttta 300
taatgagtct tttttcaatt aaagtgaata gcatcaaagc atgatatagc tttttacctg 360
agaaaatggg cttttcattt atatttgaat aaaaattcaa atttaaaact tcaccataaa 420
agtcagtaat gttgacaact tgtcagcacc tacttcatag attgataccc acactataat 480
ttagaatgtg gaagttaaaa tagtatctac accctgaata ataaataaca tgcactaaag 540
acttttcttt tatggaactc tattagtgtc ctctctaaaa ataaaatgaa atgaactttc 600
ctaaagtgtg gtaattattg tactatctaa gtcacatcc tggccttatg aaatattggc 660
atttcttact ggtgtaactt ttattagaag catctcatca taactagtag gatttctcga 720
g

```

<210> 1147

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1147

```

gaattcggcc aaagaggcct agtgtgaagt ggttggcgtc ggccgcagat gaccacaccg 60
tgaagctctg ggatctcact gccggcaaga tgatgtctga gtccctcgtt cacacggggc 120
ctgtcaacgt ggtcgagttt caccccaacg agtacctctt ggctcccgcc agctctgaca 180
ggacaatccg ctctctgggac ctggagaagt tccagggtgt gagctgcatc gaagggggagc 240
ctggggcccg caggagcgtc ctcttcaacc cagatggctg ctgcctgtac agcgggctgcc 300
aggactcact gcgtgtctac ggctgggaac ctgagcggtg ctttgatgtg gtccctcgtca 360
actggggcaa ggtggccgac ctggccatct gcaatgacca gttgataggt gtggcctctt 420
cccagagcaa cgtctcctcc tacgtggtgg atctgacgag tgtcaccagg actggcacgg 480
tggcccgga cctgtgacg gaccaccggc ccctggcaca gccactgcc aaccccagcg 540
ccccctccg gcacaatctc gag

```

<210> 1148

<211> 199

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (72)

<400> 1148

```

gaattcggcc aaagaggcct atctatgtaa agtgatactt ctttctgtac aagaaatatt 60
acttctccct cnccccaccc aacaaagaaa aagttaaaaa ccagtattcc ttcaaagtca 120
tggggatacc attggcattt tgaatgggac agttcccttg gcagtggaac tctactgctt 180
atctctggcc caactcgag

```

<210> 1149

<211> 319

<212> DNA

<213> Homo sapiens

<400> 1149

```

gaattcggcc aaagaggcct acattattct tattcttaca ttcatgtgtt ctgcatttga 60
ctgctacccc tatgtcattc tcaactcaaa tcatggtttg ttccactccc acatggctac 120
ttagagggca aattcctaaa tactgccaga gaaaataaga atagagtgtc aataatcccc 180
ttttgtttca gctttacata tgttctcgtc agtcttttga aatactgtga tgcctctata 240

```


gatggggaaa tagaagttag tgaatttctt tagaatatca gtaagtaaat aattgctttt 300
ccaactgtca acactcgag 319

<210> 1150
<211> 316
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (82)

<400> 1150
gaattcggcc aaagaggcct agccccttac tctcatgttg ctctttttct tctcctcgg 60
tctttctctt tttatctctt tnatctatct catccagcgg ttggcaaacc tttcctttct 120
tagctctgtg tccgccagcc tcttttgctt ctcggacagc aagctctttc cagggccacc 180
gtttcctcct ctgctattct tttctcacgg agagtggag ctctcatggt gcttccagaa 240
gcaattctgt tctctcctt tggggctgag ctcttctctt caatcctggt tccatgatgc 300
agaagaggca ctcgag 316

<210> 1151
<211> 544
<212> DNA
<213> Homo sapiens

<400> 1151
gaattcggcc aaagaggcct acagagtaaa agtggtttatc aaaaagctct ttaaaatatg 60
tatgctgttt gaactagcag ttccgctttt aggaatctat cctggggcaa aagaaataga 120
tcagtgggtt aagattaagt tataatagca aaggaaaaaa ggactaaact caaatgtgca 180
gcaaaaggag acttactgat aactcacagt tcatttctat aacagcataa tatacagctg 240
ttaaaaatta tgtagcaccg taccaaatgg tatggaaata ggtttgtgga attgctaaat 300
agataaaaaa tttaaatgaa actaaataat atgttttagca tgattccagt tttgaaaaaa 360
aaaaacgaat gtatataaaa tgagtagagg aatatacact aaaattatta tggtagttat 420
ctttggatgg taggatttaa atacttttcc ttttttctt gataccattc tgtattttcc 480
aatctacac taaaaacaag ttttgacaaa aataattcat tctttaagga aaaaagcact 540
cgag 544

<210> 1152
<211> 682
<212> DNA
<213> Homo sapiens

<400> 1152
gaattcggcc aaagaggcct aactgggttc tttattttta tgtttattta tttgggacgg 60
gggtctggctc tgtcaccag gctggagtgc agtggtgcaa tcaactgtca ctgcagcatc 120
cacctccag cgtccacca tctcctggc ctcagcctcc ggaacagctg gggtagaggt 180
acgccccagc ccgaacaggt tttcactagg ttgcctgggc tctttctttc tttgtctgtg 240
tttgtttgtt ggttgggttg ttggttggtt ggtttttgtt tgtttgttc gagacggggc 300
tccggtctg ccgcccgggg ctgcagtga atggcgcat ctcacctcac tgcggccttc 360
tgggtctcaag cgatcctccc actgtgccc gctgaagac agcctttaga gaaagaagca 420
gggggagttc ttccgaggac agacaagatt tctggagttt ggaaagggtg agagactggg 480
tcagcgaaag gaacattccg gtctttatgt tgggatgcaa cgtatagata cagggatgag 540
acccaaaaga gccggcagag gtttgcctc gtgctcgcaa ggcaactgcc ggtggctgat 600
cccgtaaagg atacacatac ctagagcgga gcctaaagat gcattccagca tgacgggtgg 660
agccacgatg cttggactcg ag 682

<210> 1153
<211> 163
<212> DNA
<213> Homo sapiens

<400> 1153
 gaattcggcc aaagaggcct acaaacattc caagattatt atatttttga aatttgggga 60
 ttgttttgaa gttgataaaa tttttcatat tagcaattta ttgagaagtt gaaagaaaaa 120
 catgatgctc actttaagaa caagtatagc ccgggcactc gag 163

<210> 1154
 <211> 116
 <212> DNA
 <213> Homo sapiens

<400> 1154
 gaattcggcc aaagaggcct agtcattgat actattttaa agaagggatt tcttctctca 60
 atttggagaa catgacatat aagggaaaaa gtctaaatgc ctccacctgc ctcgag 116

<210> 1155
 <211> 152
 <212> DNA
 <213> Homo sapiens

<400> 1155
 gaattcggcc aaagtcgagt tttccttgaa aaataaaaga tattgcaccc atgaaataag 60
 aagagatgag gataatgcta tttctctccc tctttagttt ttgggtttgt tcttttgctt 120
 gtttaagaca tacagtttca cgctttctcg ag 152

<210> 1156
 <211> 276
 <212> DNA
 <213> Homo sapiens

<400> 1156
 gaattcggcc aaagaggcct agctacgcta aaaaataaccg agaagatata tggagtgtgt 60
 gtttacctg gaatggaaac caaaatggct ttgaactacc aagggaatc tcagaaacgt 120
 tctgctgttg aaaaatctat taatgcttcc ctgattgtat atttatttat ctactgacc 180
 aaagctgcag tatgcactac tctaaagtat gtttggcaaa gtaccccata caatgatgaa 240
 ccttgggtata accaaaagac tcagaatgag ctcgag 276

<210> 1157
 <211> 272
 <212> DNA
 <213> Homo sapiens

<400> 1157
 gaattcggcc aaagaggcct aagcgaatct tctgcaggcc cttggcaaac tccatctcca 60
 gcgtcgctcg cttctccagg tagctgatga ggtccttcat gtacttggcc atgttcttgg 120
 catacagcag tgcggcatcc acgccccct caccagcgtg tagcagcacg tccacctcct 180
 cggcggggcag gcagccggcg tcacagtcac ccaggctggg aggcgtgccc tctactgccc 240
 gtccatacag gctttccatg gactggctcg ag 272

<210> 1158
 <211> 304
 <212> DNA
 <213> Homo sapiens

<400> 1158
 gaattcggcc aaagaggcct agtttgtgag tgcgaagtac caattaaggt gtcttaaat 60
 tggcgcatag aggagagaag gaaacctgag gagtagtgtt cctcctgaat gaaggttcag 120
 gtcaccagcc ttctgtacac tgcctttggg tttagcagtt ctttgaagg caaacacctt 180
 catgtcctgt ctattcatc agctggctgt gctgtgctgt ggaccagctg tgtggatctc 240
 tagcccagct acagcagaat acattttacc agcaaaccta aggatgacaa acacccgact 300
 cgag 304

<210> 1159

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1159

```

gaattcggcc aaagagccta tttaaacagt caagtaaaat caagctgggt aatcatggca 60
gaaggtggat ttgatccctg tgaatgtgtt tgctctcatg aacatgcaat gagaagactg 120
atcaatctgt tacggcagtc ccagtcctac tgcacagaca cagagtgtct tcaggaatta 180
ccgggaccct ctggtgataa tggcatcagt gttacaatga tcttggtagc ctggatgggt 240
attgcattga tcttggtctt actgagacct cctaatactaa gaggatccac cctcgag 297

```

<210> 1160

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1160

```

gaattcggcc aaagaggcct aataaaattg agcaagtaaa gtttgggttt taattttcct 60
ttgcctgaac caagatagga aattacttaa gagttttttt tttttttttt tttttttttt 120
ttaggaatga aaggtcataa gccattagaa atagtggcat tattatgcaa taacaacacc 180
ctagctaacc tgcttttgtc atctgtagca cttacaataa agaatgatga ccttccaacc 240
ctggacacta cctcgataaa gcaaaccaga gatctcgag 279

```

<210> 1161

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1161

```

gaattcggcc aaagaggcct agattgcttg agcccacaag ttggagactt cagtgaagctg 60
ttgatcgctg gccactgcac tacagcctgg ctgacagagc aagatcctgt ctcaaacaga 120
caggcaaaaca attaactaga gttggagccc taccttacac cgtgtggaaa cacaattac 180
aaggagagtc ttagatcaaa gcttttaaact ttatagaata aaatataaaa gatgatgact 240
ttgggctggg tcctcgag 258

```

<210> 1162

<211> 452

<212> DNA

<213> Homo sapiens

<400> 1162

```

gaattcggcc aaagaggcct aatacatccc acattttgtt gttataacag ttagtagtta 60
gtattgcttt catatataga ctccagaatc taaattttac gataatgaca tttcttctgg 120
tcattgacaaa tgtaatatatt taaaaatata aatctacgta gaatccaaag acacacacgg 180
agcagtcctg tctgagaaat aaaaaatcag gacacccatg gcatcgtagt agccctctgc 240
gtccagcagg tggcgaaggg aggtgagggt tatttattaa atgggaccga gtgggacggg 300
gacggggcag ccctaagggt aggggaagcat tgtcaatttc tggggataga atgagacca 360
ggcatagctg gagtttgaag ctttgaagca aaaatatctg tagaacatct taaacgtgac 420
caaaatatga tgtaaaatc agcaatctcg ag 452

```

<210> 1163

<211> 300

<212> DNA

<213> Homo sapiens

<400> 1163

```

gaattcggcc aaagaggcct agggattttc aggtgttttc atttggtgat caggactgaa 60
cagagagaac tcaccatgga gtttgggctg agctggcttt ttcttggtggc tattttaaaa 120
ggtgtccagt gtgaggtgca attgttgag tctgggggag gggtgtgaca gcctgggggg 180

```

tccttgagac tctcctgtga agcctctgga ttcaccttta gtagttatga catgagctgg 240
gtccgccagg ctccaggga ggggctggag tgggtctcag caatcagggg gagcctcgag 300

<210> 1164
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1164
gaattcggcc aaagaggcct atgcttgtat aggaataaag acaaagtcac ataaaaaaat 60
ggggaaaatt gaacactact caccatagat cctgagtatt ttaaagagcc ttcgtagagc 120
attcaaaaatc gggtaagaaa aatggggaaa aataaaatta cttaatcttt aaaaggaaga 180
caagcgtatg ctccactaat tggacttata taatcaggct tgctctagct tatccagaat 240
cagagtacag gccgggagca gtggctcatg cctgtaatcc cagcactttg cctaaaccgt 300
cgattgaatt ctgacctgc ctcgag 326

<210> 1165
<211> 285
<212> DNA
<213> Homo sapiens

<400> 1165
gaattcggcc aaagaggcct actcctgcac aagaacatga aatacctgtg gttcttcttc 60
ctcctgggtg cagccccag atgggtcctg tcccagggtg gggtacaaca gtggggcgca 120
ggacttttga agccttcgga gaccctgtcc ctccactgag ctgtctatga taagtccctt 180
agtggttact attggagtgt gtcccgccag tcccccgga aggggctaga gtggattgga 240
gaaatcaatc agagtggaaa caccaactac aaccctgcc tcgag 285

<210> 1166
<211> 279
<212> DNA
<213> Homo sapiens

<400> 1166
gaattcggcc aaagaggcct acataattta accattcccc tgtgttgga agaaatacc 60
aaacctttcc taataatcag tattgcaatg accattataa cacccttcatt tttttttttt 120
tttttttttt taacattttt ttgtatttac tttatggagc ggctgtgtgt ccagtatgtc 180
cgacctctct cctcggttct gggctcgggt ggggggttccc ttggcaaaact gcaggccct 240
ggctgggacg cccctgctgc cagcgccggc agcctcgag 279

<210> 1167
<211> 269
<212> DNA
<213> Homo sapiens

<400> 1167
gaattcggcc aaagaggcct aagcaggcta accgtggaca agagcagggtg gcaggagggg 60
aatgtcttct catgtccgt gatgcatgag gctctgcaca accactacac acagaagagc 120
ctctccctgt ctctgggtaa atgagtcca gggccggcaa gccccgctc cccgggctct 180
cggggtcggc cgaggatgct tggcacgtac cccgtctaca tacttcccag gcaccagca 240
tggaataaaa gcaccacca aactcgag 269

<210> 1168
<211> 267
<212> DNA
<213> Homo sapiens

<400> 1168
gaattcggcc aaagaggcct acggtatttg gctgttgtct accctttgaa gttttttttc 60
ctaaggacaa gaagatttgc actcatgtgc agcctgtcca tctggatatt ggaaccatc 120

```

ttcaatgctg tcatgttctg ggaagatgaa acagtgtgtg aatattgcga tgccgaaaag 180
tctaatttta ctttatgcta tgacaaatac cctttagaga aatggcaaat caacctcaac 240
ttgttcagga cgtgtacgaa gctcgag 267

```

<210> 1169

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1169

```

gaattcggcc aaagaggcct aatgccttcc tggaaatttt catttgctc tattcctatt 60
gtattatttg ggttctttcc atatttgttt gttcaagatt ctctcatcat taaaaacaaa 120
taaacaaaaa cctctactta accctcctca tccattact gctctacttc tctccttca 180
taaccaagta ttatctacat gcattgtctt cacatcctgt tattaattcc ccaatgcatt 240
aaattctggc tcatcgctct actacttctc gctgccattg aagctcctct tccagagtc 300
actggttact tctatttctt gaaatcagta ggaagctttt cagtcccagt cctactggac 360
ctctcagcag ctctggccaa tgctgaccac tcccccaatc cagaaacact cgag 414

```

<210> 1170

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1170

```

gaattcggcc aaagagccta gtgtcttctc cagatgctgc atcagctgct gcacccagag 60
ctcctttggg tctgcacata gctctgcctg agagcgcttg cggggcaaga acaggatagc 120
tgggatggag cagcctaagc ttggttcctg ctcccggtag ctgcggacaa ccttggcggg 180
aatcttcctt tggctgtact tgaggcaaca gtccctgagcc cctccatcac tgcttgggt 240
cctgggggatg ccaaaggcca gaaccaggat aaggaggctc agagccagt actgagccat 300
gtctgtggta gaggtgtagt aagaggccag agctgagggt gaggtgggca gctgcaagtt 360
gggggtctcg ag 372

```

<210> 1171

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1171

```

gaattcggcc aaagaggcct agtttttttg tggttttgtt gttgtacatg ttatagctgt 60
tacaaactca acaatacatt actacaatta ttacttttac atcatttaaa gaaaatgaac 120
aaaggaaaagc aaatatatat ttgtagcttt tgttatagta acctatttta tcatttcagg 180
ttgtttgttt atttttcttg tggattcatt accatctgga gtaattttgt tttctttttc 240
tttctttttt ttttttttgg agggataaca gggctctgct ctggttccca ggctgctgga 300
gtgcagtgct atgaatacat ctcaactcgag 330

```

<210> 1172

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1172

```

gaattcggcc aaagaggcct agtttttttt ttatatattc tggatattaa ttatacgtat 60
gttttgcaaa ttttttttct atttcataag ttgccttttc actctgttgt ttcctttgtg 120
gtacagaaat tttaaagttt gatgtagctc tatttgttta tttttgcttt tgttgcttgt 180
gtttttgtgt catattcaag aaatcatcac caaattcaat gttagggaagc tttttttatt 240
tttattttta ttttttaata gagacagggt ctcaggctgg tctcgaacct ctgggctcaa 300
gtgattctcc taccttggcc tcccaaagtg ctgagattac aggtgtcaag ctcgag 356

```

<210> 1173

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1173

```
gaattcggcc aaagaggcct ataggcctct ttggccggcc aaagaggcct attcaaattg 60
tgtttttaac ctttttagtat ttcttggttaa attttctttt aagggtggatt tgacgtacta 120
aataatacaa attgataaat aggttttttag taacgtactg taaagtgtag gcagagagaa 180
gcattctgta gtcttatagt taggtctctg acgtctggta agcctatgcc cctgaactgt 240
aaacttcacc agtgcttctt agaccgtcct cttgtagaaa caggttaactg cctcgag 297
```

<210> 1174

<211> 259

<212> DNA

<213> Homo sapiens

<400> 1174

```
gaattcggcc aaagaggcct aattttattg caagtaaatg tatttcacaaa ttgtttattg 60
gtttttgatg agattattct cagcctactt cattatcaag ctatattatt ttattaatgt 120
agttttgatg tcttacagca aagctgaaag ctgtatcttc aaaatatgtc tatttgacta 180
aaaagaagtt attcaacagg agttattatc tatgaaaaaa atacaacagg aatataaaaa 240
acttgaagag gatctcgag 259
```

<210> 1175

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1175

```
gaattcgcgg ccgcgtcgac gaggggttta tctcctccaa aaaaaaaaaa aagggtgcttt 60
aagtaataat tgagttgcta taaatttggg tataaatca aattttaatt gatttgcatt 120
ttacaagca cgaagaaaat ttgtcattaa aaaatggtaa tacatttcat aaacatttat 180
tttataacat tatacctttc caatgtagct ttttggtgt tccctttttt tgtttgtttg 240
tttgtgacca agtcttgctg tcacccaggc tggagtgcag tgggtgtgtga tcacggctca 300
ctacagcctt cacctcccag gcccaagcaa tcctcccaac tcgag 345
```

<210> 1176

<211> 272

<212> DNA

<213> Homo sapiens

<400> 1176

```
gaattcggcc aaagaggcct agtgtttttt ttagaaaaaa atgcttttga gaaatggatt 60
cattacaggg aaattatcaa agtccagttt cccaaagctt ccggattata aacatctaca 120
tattcagttc tatacatgta ataaacatcg tgttcacata actcttgcatt tattttttgc 180
tttgacaaaa aaaagtagta aacaggatta tatctttagt tcatgtacta aatgacagcg 240
tctcacactc tcagatccag ctgcatctcg ag 272
```

<210> 1177

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1177

```
gaattcggcc aaagaggcct atcgagtggg gtgcagaggg aagctggggc cttgggggtcc 60
ccagggggcat ggggagggaa ataaataata aacaccatgg gggataagga gccaggagga 120
atgggggtgt gaatggggag gtgctcgatg cttatttgtg gcactaaagg tcttgcaaga 180
tgccccctga ctggggggcg tgtccatgaa ttctcgag 218
```

<210> 1178

<211> 728

<212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (20)

<220>
 <221> unsure
 <222> (72)

<400> 1178
 gaattcggcc aaagaggccn aggtaccact ttttaaagct agctgtgtcg agttaaagaa 60
 aaaatcagca gntttttctc ccagaaatgt aattgccaaa cactattcat ccccatctta 120
 agttttacaa ggtgatgtaa tcagcttgtt gtagtgatgc tggccaaatg gtgtcagca 180
 ggtgagaaca aaaaaacccc agatttcagt gaactaatac acagcttgag cgtttccatg 240
 tgctaagtgt gcacacttac taaaaaactt tggaaatgga aaataatgta ttagtgcaac 300
 agttgatgtg cttctttggg caaagatata gttttgttcc acaatttgta cttaaaagcg 360
 aaagaacatt gaaaacatag acttactggc tgtagcaatg ctggcctgtt aactgataac 420
 tagaacttag gttcacgttt atgtaaagtg tgtaaaacct agtagagctt gcatagtcgg 480
 cactcagtaa atgttttggt ctttttgccc cttggtaagt ttattttacc atcctccac 540
 ctgccattct gactttatta aatcaacatg tggaccagag tgtaaatgag atgttattgc 600
 agaagagatt gagaaaattg gtatatcatg cagataacat acaaaatctt tttgtaacgt 660
 aaaaaatgca gttttattat tgcttgtgcc tcaactgttt aagtgaatat taaagggtct 720
 atctcgag 728

<210> 1179
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1179
 gaattcggcc aaagaggcct aaaaaagaaa ggaagacaaa aatagaaaga gagcgtaagg 60
 gcaatacata gacaatagta ataaatatga tagatattat taaccaggt attttaataa 120
 tcattttaac tgtgaatggt cgaataaac caattaaaag atggagattg tcagagtga 180
 tctaaaaaca aaacccaact gtatatcttc cacaagataa ccactttaaa tagaaagact 240
 catatagatt aaacgtaaag gaatggagga aaatatacca tgctaacact aataaaaaga 300
 aagcggaaga atagatgaat ccactgttag agttgaagac ttcaacatct ctctagaaat 360
 tgacagatgc agcagccgga aaattggtaa agacataatt gaacttaaca gcaccatccg 420
 tcaactggat ataattgaca tctatgaact gcttcatcca gcaatagcag attactaatt 480
 cttctcaagc tcaactcgag 500

<210> 1180
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 1180
 gaattcgcgg ccgcgtcgac agcacatgca tctcccacag cctctgccgc gggatccatg 60
 aagatctctg cagctgccct caccatcatc ctcaactgcag ccgccctctg caccctccga 120
 cctgcctcac catatggctc ggacaccact ccctgctgct ttgcctacct cctcgag 177

<210> 1181
 <211> 704
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (26)

<400> 1181

```

gaattcggcc aaagaggcct agaacngagc ttgctgtcta cctatgaact cccatcttgt 60
taccacaaca aagacctaac tagcatttat gacataaagc cttttccaaa aatcacagat 120
actaaaaaga cagaagattt atactggaga cagcagtcac taaaaaccca acccacacct 180
tactgtaaac cagaccactg gattcactat gaaaatctta aatctcccc acgtgatcag 240
tataatatgt gtccagaccc tgttagcctt agtaaaccta gtgttttaca aaataaaca 300
gacacggaag ctttctactt agaacatttt ttaagtaagc cagaagaaga gttgttcttg 360
aatatggaaa acaatgaaga aacaagacct gttcttggtt ggattcctag agctggagtg 420
accaaaccct agaccaacct gctggagctt aagaactctt tttcaaaaac tgggtgcaca 480
aagcgtttcc ataaatcaat tctagaagac cataaagacc tcagggataa tgagcattcg 540
gggatgaagc accaattcta tggccataat tcctattatt tctataattg agatactcat 600
tcttcccttc aaaaccgagc ctcttgcaag aagctaaaaa atataacaga atttccctcg 660
tattgtctga ttctgttttc tagattaaac cacaaggact cgag 704

```

<210> 1182

<211> 863

<212> DNA

<213> Homo sapiens

<400> 1182

```

gaattcggcc aaagaggcct acctaagacc cccagattta gcagcagcaa ccagtgggga 60
tctgggctac ctgggcacaa gaactcctct aaaaatacaa agccaaaacc aatcccatgt 120
gcacatttca aacatacgat ttgcatctaa atcaagtgat tcttgaattt catcaagcag 180
ctgaaaaggcc taaaaatttc aaatatatta cataacagtc tagtgaccaa agctagcttc 240
tcattatata gtcttatttg tttatcctaa gtactctaac cacatcacct ggtggccctg 300
aaaggctggt ttggctgaaa aaaatgtgac agaggccagc agatgctttg gaaagcagga 360
ctctagatgt gaatttgtgc tcagagctct gtacaaaact ctcaatatga gaaccacaa 420
aagcagagtt agaattagct catttttagg tcccaataa caaacatata attttgcaa 480
gtgatgggaa agtaatttca aaagaagcaa tgggtacaaga tggctcaatt gatctagccc 540
cacacagact tcagacagca atgcctgatt cagcaaacca ggtaggggtg tgacattctt 600
taaggcttag gagtggcagg agcagcttgc atcagtcata tggaaacata actgggtctt 660
caaccatccc tgaacactca gctctgtccc cacaggagga caccagggac ttgtgtctga 720
atcctcatca agcccttttg tgcggtgtct tcctcatata tctgagccct gcagaaacac 780
attccctgcc agctgccacc tgccatgtgt ctgtaccact cttctctgtg ttgcatctg 840
tgggtcttga cacccttctc gag 863

```

<210> 1183

<211> 652

<212> DNA

<213> Homo sapiens

<400> 1183

```

gaattcggcc aaagaggcct actcctggcg atggtggcgc cgttctttgc cctcttcccg 60
gtctgccttg tcataccgc ggtcccgatc ccgttccctg tctcgtcttc tctctctgtc 120
taccttgta tagccacgct ctcgatccct gtcagacttg tctgtggccc ggtctgactt 180
gtcgtggccc ctgtctagtt tctcatggct gcggtccgac ttgtcatggc cctgttccga 240
cttgtcatgg ctccggtcca acttttcttc agcatctgca ttaactgttc tgagcttctt 300
ggccgatttg gtaaccacgg agttggggtc atgtggggag agccaggata caaggctctg 360
gtctgcattc cagtagtaag ggagcccgca ggaagggctg aacaccttgt accagcttgg 420
tggtagggcc tccaacctgg tggcctcgta gtccacagga tcacgtcat agtctctggc 480
aatgatctct tcctctgggt caggctccag atgtttgagg atgcctctct tggccaagcg 540
ggtctgcagc gcaaccggca gcgcatagc tgatagcaga cagacctggg cccacacgac 600
tctcttccca aaacaccgaa tgagaccttc tctcaacgag gccttctctc cg 652

```

<210> 1184

<211> 126

<212> DNA

<213> Homo sapiens

<400> 1184

gaattcggcc aaagaggcct agtgaagcgg accaaagtct atggaagtgt ttgctgcact 60
 ttggactaaa ataaagaggg cctgtaaggt gtttttagaaa cttgtccttc atccacagat 120
 ctcgag 126

<210> 1185
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 1185
 gaattcggcc aaagaggcct aggcagagcc aggttcatac atggaaaagg cctggcgatc 60
 cctgcgggtgt gtgctcccgc ctggcgccat ggggtgtgtgt tccgcccggt cactggggag 120
 tggaggtgtgt ggcaccggcc ctggaggctg ccggagctgc aggttctccg cctgcagctt 180
 gtggatctct cgctgcagcc tccggagctc gtcgctcagg ctactgttga cttcatgag 240
 ctgctgcacc ttgtcctccg atgtagccag ggccttcttc agctccaggt actcctgcag 300
 cgtcacagcc ccgtcagaca agtccgagga gtccatgtct cggggccgggt tgctccgagt 360
 ggcgcgggtg ctgcgcaggg gctcctggtc tgtgtcctcg tcagaggcca cgctgtcgta 420
 gtcgtgttgg tcgtcgaggt cactctggct ccgcagagac agctcgag 468

<210> 1186
 <211> 328
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (116)

<220>
 <221> unsure
 <222> (125)

<220>
 <221> unsure
 <222> (147)

<400> 1186
 gaattcggcc aaagaggcct acacaggcag acatactcac agagacacac acagacacac 60
 acaaacagaa actcacacac acaatcacac agagacacac atgcagacac acatanacat 120
 acacngacac atagagagac acacgngac acacacacac agagacatgc acacacagag 180
 atacatgcag atacacacag agacacagc agacacacac acagaccggg acacagacac 240
 acacatgcag acatactcac agagacacac acagacacat acaaacagaa actcacacac 300
 acaatcacac agagacacac gtctcgag 328

<210> 1187
 <211> 488
 <212> DNA
 <213> Homo sapiens

<400> 1187
 gaattcggcc aaagaggcct agggaaaaag taaaaaactt ttttggattt tgtacacata 60
 gttttggaaa gcttaggaat gtgaagtcaa caatatacct ttaaaatata aaattataag 120
 gcaataacaa tttttttcaa accttaaaat gttccaagaa aatgactaa gaatgatttt 180
 tttccatcca gtatatgtct taaaaataag gacaaactat aatagaagta acgatttttg 240
 gtacacatgt ttaaaaaaat gtccatgtca ataaacaatt tcaattaatc aataaactta 300
 aaacaacccat taaatgtaat ttgcattttt gtatcagatc catacaatct caaatatcaa 360
 gattttctta agctcaatgc taaatgaccg gatattctatc attgtggaga aacagagttt 420
 gatcttaggc agacgaaagg aaaagaaagg cacacaccta gaagaatcac atgagtctca 480
 ttctcgag 488

<210> 1188

<211> 473

<212> DNA

<213> Homo sapiens

<400> 1188

```

gaattcggcc aaagaggcct atgctgcctg agtgccggag acggtcctgc tgctgccgca 60
gtcctgccag ctgtccgacg atgtcgtccc acctagtcga gccgccgccg cccctgcaca 120
acaacaacaa caactgcgag gaaaatgagc agtctctgcc ccgccggcc ggccctcaaca 180
gttcctgggt ggagctaccc atgaacagca gcaatggcaa tgataatggc aatgggaaaa 240
atgggggggt ggaacacgta ccatcctcat cctccatcca caatggagac atggagaaga 300
ttcttttggg tgcacaacat gaatcaggac agagtagttc cagaggcagt tctcactgtg 360
acagcccttc gccacaagaa gatgggcaga tcatgtttga tgtggaaatg cacaccagca 420
gggaccatag ctctcagtca gaagaagaag ttgtagaaga agagctactc gag 473

```

<210> 1189

<211> 429

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (145)

<220>

<221> unsure

<222> (196)

<400> 1189

```

gaattcggcc gaagaggcct aggggtgggt tgtagtctta ggggtggctg gtttgaaga 60
aagaccacca actgcttcgg tttgctcagt gcctggctca gcataaactg atggaaactg 120
ggtgggttttg tcaactatatt ctgtncctgg tacattgtcc tcgtctgtgt cggtagattt 180
ttccatctcg gtaggnactt tagattctac agatgttttt cctggttctt ttaaacattc 240
taattttctt tgtggtgtcg ttcccttctga ccatttctct actttaatct gatgaaattg 300
tttaaccaga tcttttatac ccatagtagt attccctcta tacatagtaa gttcttgaaa 360
ataagctgct gcaaactggg tgatgtttga tgggttggtt ttgagaacag ctctgctaata 420
tccctcgag 429

```

<210> 1190

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1190

```

gaattcgcgg ccgcgtcgac atgggctgtg ccttcatcaa cctctgcatac ttggcttcac 60
agcatgtctg ggctcagctc acattctggg aggccagcca gctttacctg ctgttcctga 120
gccttacgct ggccactgtc aacgcccgtc gggtggaacc ccgcaccaca gctgccatgt 180
gggccctgca aaccgtggag aaggagcgag gcctgggtgg ggaggtacca ggcacgctcg 240
ag 242

```

<210> 1191

<211> 230

<212> DNA

<213> Homo sapiens

<400> 1191

```

gaattcgcgg ccgcgtcgac atgaaagcgg ggaaatgtgt gtccccact gtgctgataa 60
atgtgtccat ggtcgtgtga ttgctccaaa cacctgtcag tgtgagcctg gctggggagg 120
gaccaactgc tccagtgcct gcgatggtga tcaactgggt cccactgca ccagccggtg 180
ccagtgcaaa aatggggctc tgtgcaaccc catcacgga gcttctcgag 230

```

<210> 1192

<211> 217

<212> DNA

<213> Homo sapiens

<400> 1192

```
gaattcgcg cgcgctcgac tgcgtccac agacctgcyg tgcactgcc atcgccatcc 60
atcgcatcc accgacagac tgcgtcttct agtgatctgt actcacctcg gaggtatctg 120
ggctgggacac agcccctgga caatgatcca gacagctggc tgccccctcaa gggacctgtt 180
accttcagcg agaccattt cctccccatc cctcgag 217
```

<210> 1193

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1193

```
gaattcgcg cgcgctcgac cccactcccc ttccccatc tctcactgtt ttgtgtacac 60
actgtgcaca cactacctgt gctccctgcc ccacatgctt gcacactgct tgctcctcct 120
gcagggaactc tctctcctt tccacatgcc cgcagcttct ctcccaacct cagtctcaac 180
agctcttctt caccagctga cagcccgggg ccattgcccag cattctcttc ccctagcgct 240
cgag 244
```

<210> 1194

<211> 236

<212> DNA

<213> Homo sapiens

<400> 1194

```
gaattcgcg cgcgctcgac gaaagtcatt tataacccca aatgttcac atactcatct 60
ctatgtatat gctcatctct atgtatatgc cctatgtcac tcaggaaaac attagttaac 120
taaccatctc tcatttaaaa acaaaacctt ttggggcagg cgcggtggcc tacgcctgcy 180
gtcccagcac cttggggagg ccaggcgggc agatcatccg aggtcaggag ctcgag 236
```

<210> 1195

<211> 231

<212> DNA

<213> Homo sapiens

<400> 1195

```
gaattcgcg cgcgctcgac ctgcctgttc tgtatccac tcaaggccct caggcatccc 60
acgttcacaca ttctgaaat ggccctgtct cccctcacc acagcctgct cctcagcatg 120
gcagtcactg tctccaccca gcttttctgt cagggtccct ggggtcctgc acaagtccgt 180
ctctgccaca tcccacgtca cccgctccc acgtcaccac cgtccctcga. g 231
```

<210> 1196

<211> 149

<212> DNA

<213> Homo sapiens

<400> 1196

```
gaattcgcg cgcgctcgac attgggggtg cagggtggca gaaggtggat ttgtgtcaag 60
agctgaacat gctgctgcat ctgctgctgg agtctcttcc tttgtgctgg gtccagaatc 120
agggtctgat gaactccctt aactcgag 149
```

<210> 1197

<211> 207

<212> DNA

<213> Homo sapiens

<400> 1197

```

gaattcgcgg ccgcgtcgac ctttaaataa aattaggaga aaatgtcgaa gcagcagctc 60
cttcactct tggcctgggt ggccctagtt cactgtaca ctttgccac tgcgtcactg 120
ccggttccag ggcagccggg agccccactt gggaccctgg cctcccttc tgtgaggctg 180
gtgcttcggg acgtcgcctt gctcgag 207

```

<210> 1198

<211> 255

<212> DNA

<213> Homo sapiens

<400> 1198

```

gaattcgcgg ccgcgtcgac gcagcagttt ttgttcattc atttgccca aaatcacgtg 60
taggatttgg ggatgtggat atttaagaca atttctttt tcttttgggt taataggggc 120
gggtataggg accaactggg accgagtgcc cagggggcgg agcacggta tgcctggcgg 180
cctgcatgca tgcgtgtgcc gggctgggct gggcggcggg cggctgtggg gcagggttgg 240
gggtctcacc tcgag 255

```

<210> 1199

<211> 226

<212> DNA

<213> Homo sapiens

<400> 1199

```

gaattcgcgg ccgcgtcgac caggattgtc attttccctt ttgcctgtgg gtttaacttt 60
tgtatttttt taatcacaag ttgtatacaa aatgttttta tegtactctt tggagatgcc 120
cattctactt ttgaatttag cttttactaa ttcgcatctg gaagctcagc aagtgcacaa 180
gccttacttt ggttaccgtg gaaaccactg ccaccctggg ctcgag 226

```

<210> 1200

<211> 301

<212> DNA

<213> Homo sapiens

<400> 1200

```

gaattcgcgg ccgcgtcgac ccgcctgccc cagcatgtcc tcaactttct gggcgttcat 60
gatcctggcc agcctgctca tcgcctactg cagtcagctg gccgccggca cctgtgagat 120
tgtgaccttg gaccgggaca gcagccagcc tcggaggacg atcgcccgcc agaccgccc 180
ctgtgcgtgt agaaaagggg agatcgccgg caccacgaga gccgggccc cctgtgtgga 240
cgcaagaatc atcaagacca agcagtgggt tgacatgctt ccgtgtcttg aggtctcga 300
g 301

```

<210> 1201

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1201

```

gaattcgcgg ccgcgtcgac ccgcgccgaa gcacctagag agcggcgct gcgcagcggg 60
agtcgaagcg gagatcccgg gtcgcgcgag agccgcaagc ggagtgtgtg ggcgctatgc 120
tatcaccgga ggcagagcga gtgctgcgtt accttgtaga agtggaggag ctgcgccagg 180
aggtgctggc ggacaagcgg caggtgagag gccctccgc ggcgatgggg cctggcggcc 240
ggcgcgtggt gaaagcgcgc ggggtcgag tgagttgacc tggacaggcg gttaacggct 300
ccgagggcag agacctgggc cgataaatat tcggccgcta ctaagtgagc gcctgcgcta 360
tgctggacat tacctcgag 379

```

<210> 1202

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1202

```

gaattcgcgg ccgcgtcgac gtggtggttc cgcgatggta ggccggcggc gggtcggcgg 60
cggcctctcg gagaatgcca acccctcat ctaccagcgc tctggggagc ggccctgtgac 120
ggcaggcgag gaggacgagc aggttcccgga cagcatcgac gcacgcgaga tcttcgatct 180
gattcgctcc atcaatgacc cggagcatcc acaaaacgct cgag 224

```

<210> 1203

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1203

```

gaattcgcgg ccgcgtcgac gtgatatttg tgggatggtg ggtatgtttt gtttcctgat 60
ttctctgcag tctctgctgg gctttgggac taaggctgta cttgcctccc aaagagtgg 120
gaagtgcctg tcatttctcc ttgccaggaa caccatggct ggcactcgac ggggtggagg 180
gcagggttggg ggtaggcccc ggggtcctgg ctgcagcctc atgcgccac ccccgagg 240
gtgcgctggg gagccgctgt tcatgctgta ctgcgccatc aagcagcaga tggagaagg 300
ccccattgac gccatcacgg gtgaggcacg ctactccctg agtgaggaca agctcatcc 360
gcagcagatt gactacaaga cactgaccct gaactgtgtg aaccagaga aactcgag 418

```

<210> 1204

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1204

```

gaattcgcgg ccgcgtcgac ctcatgctga ctttactctc cttcttcttg ggggtgtttg 60
ttctcttctc ggtttgctgg ttggaagacg aagatgagga ggagctggtg ctggccctcg 120
aatcgctcgc cgacatagcg aacccccac cccaccccg cccacagccc tctctttgtg 180
tctggtcctc cgtgcccgc gcggcggtg ctgctgcggc tgcggctggg cctggccact 240
cgtgtctctc tctcgttgg agagaagcgg aagtgcagca acagcaacta ttaaacaggc 300
aatggcttcc cccagccaca cagctcgca cacacaccac tctccgccc cgcctctctc 360
ctcctctctc tctctctctc cgcctcacc cctccccct cgag 404

```

<210> 1205

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1205

```

gaattcgcgg ccgcgtcgac cgtccttgag gacgcctgac cgggtcagtg ttagcctcca 60
gccctggttg tggaaggcga cagaagtcac ggcgatgtct gagcagatga gagccaacgt 120
gggcaagtgt ctcaagggtg tcgacaggtc tgagcccggt tggaggaagc gctctggcca 180
agcggggcgg aggagagggt ttcccgaga cagcaagggt tgttcagggt cctgggcttg 240
ccgcgggggt ggggttctct atcctcctgg aggaggagat gcttaaagaa acggcactga 300
gctgggggta gtggctcacg cctgtgatcc tagcactttg ttaggctcga g 351

```

<210> 1206

<211> 236

<212> DNA

<213> Homo sapiens

<400> 1206

```

gaattcgcgg ccgcgtcgac atgggcctct ggttttactt ctgcttctc ttttttttca 60
tcatcatcgt catcccagtt atccttgacg tctctgctct cgtcctcgcc tccccagcg 120
tccccgcgg cagtgcggc gcccccacc ttccgactg ggtcttccac ggagaaagcg 180
tcggcgctccc aggagtccga gtcccccgcc gccgcggccg ccgcggccat ctcgag 236

```

<210> 1207

<211> 278

<212> DNA

<213> Homo sapiens

<400> 1207

```
gaattcgcgg ccgcgtcgac atgggtttcc tttttctggg tgtttttatt gtcacctca 60
ccatcggtggc ttgtggcatc tgcctgcctg tcagtctctg gttccctgtt tctgggtgtt 120
ttgattgccca ccctcaccat cgtggctctg ggcatctcg tgcctgtcag tcttgtcctt 180
ccatctgccca tggctttgcc aggccttctg tgcctctcac cccctctctt gctcctcag 240
ggaaagagtc ggcaggtgcc ctttctctcc acctcgag 278
```

<210> 1208

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1208

```
gaattcgcgg ccgcgtcgac aaaaggcctt atttctcttc ttgattggca taatgttgtc 60
atttctttac acatcacagt atttcttact tccttaagtg gcgtagggct tattcctcag 120
cagtcaacta tctcatagat tagccaggca tgggtggtgca cacctgtgat cccagctact 180
tgggaggctg aggcaggagg atcacttgag ccccgagggt tgatgccgta attgtgccac 240
tgcaactccaa ctgagcgacg tttctctgaa aaaaataaaa ataaaataaa actattttaa 300
aagtaaatat ctcatagagt agctgtgtga taaggatgtt tagctatgaa tggctcttgg 360
aaaaggcaag ggcttaaaag aaagaatctc gag 393
```

<210> 1209

<211> 285

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (212)

<220>

<221> unsure

<222> (215)

<220>

<221> unsure

<222> (227)

<220>

<221> unsure

<222> (249)..(250)

<400> 1209

```
gaattcgcgg ccgcgtcgac ggcacatttt acaaggaaat ctgtgtcaaa acagataaca 60
gtgcataaat caatccaaat ttagaccctg gcaaccagtt ccccatgtct catatacggg 120
actctgtcaa acggtaaata ggcaatcatc tctcttgaaa agtatacatc ctctctcgca 180
ctgggtggaaa gcaaaattga ctttttgttt gntgnataaa aacactnagc acttcagaaa 240
ttaaagaann gcctactcac cccacacctt tcccaaaatc tcgag 285
```

<210> 1210

<211> 405

<212> DNA

<213> Homo sapiens

<400> 1210

```
gaattcgcgg ccgcgtcgac tgcagctctg aagaagctgc tctattcggt tttgttttcc 60
cgccactggg gcaagccctc cttccacact atgaagacga aaattgccag caccacatga 120
```

```

agcccgacca ctgcaacaat ggtcgcataa aagccgctgt cttcaggga catcaacatc 180
agactttgga aaagaagtaa tttgcaggaa aaatataacc ccacaggaaac ttttaaccata 240
agccctgcaa aaaggagaaa aatcttgaaa gtcataagca caacgccctc agacttgggc 300
tcggctgctg cggcagtggc agcccgctgc gcggtaggcg gaggcctgtg agagcgcggc 360
atcgtcagtc agtccgctcg tctgtccgctc cgtcgatgcc tcgag 405

```

<210> 1211

<211> 284

<212> DNA

<213> Homo sapiens

<400> 1211

```

gaattcgcgg ccgcgtcgac cacaaccccc actccagggc cagtttcccg cctccagctt 60
cctgtcccat cagaaccgta cactttgagc atgctcagtg tattatatgt tgattacatt 120
tatatattat gaccctattc tatattctat atcagattta ttttattata gccagggtgc 180
atggctcacg ctcagcctcc caaagtgtg ggactaccag catgagccac tgcacccagc 240
ccccagatct ttggcctcat gaggtcgaca gtccagttct cgag 284

```

<210> 1212

<211> 335

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (21)

<400> 1212

```

gaattcgcgg ccgcgtcgac nacatgttgt cacaccagc catccgccgg agctctctct 60
taactgagaa actcctcaga ctcccttctc tcatctcaat tgctctccca gaaaacaagg 120
tgtcagaagc acaggctaatt tctggcagcg gtgcttcctc caccaccact gccacctcaa 180
ccacatctac caccaccacc actgccgcct ccaccagcc cacacccctt actgcacca 240
ccctgtcac ttctgtcca gccctggtg ctgccacggc tatttccacc attgtcgtag 300
ctgcttcgac cacagtgact accccacaac tcgag 335

```

<210> 1213

<211> 229

<212> DNA

<213> Homo sapiens

<400> 1213

```

gaattcgcgg ccgcgtcgac ggataaagca gatgtttatt ggggcattcc ttatccagc 60
tatgggtgtg ggcactgcct tcttcatcaa ttcatagcc atttattacc atgcttcaag 120
agccattcct tttggaacaa tgggtggcgt ttgttgcatc tgtttttttg ttattcttcc 180
tctaaatctt gttggtacaa tacttggccg aaatctatca ggtctcgag 229

```

<210> 1214

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1214

```

gaattcgcgg ccgcgtcgac ctggccttcg actcgctatg tccactaaca atatgtcgga 60
cccacggagg ccgaataaag tgctgaggtg caagcccccg ccgagcgaat gtaaccgggc 120
cttggacgac ccgacgccgg actacatgaa cctgtggggc atgatcttca gcatgtgcgg 180
cctcatgctt aagctgaagt ggtgtgcttg ggtcgctgtc tactgtcctc tcacagctt 240
tgccaactct aaggagctcg ag 262

```

<210> 1215

<211> 505

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (14)

<220>
<221> unsure
<222> (17)

<220>
<221> unsure
<222> (40)

<220>
<221> unsure
<222> (99)

<220>
<221> unsure
<222> (103)

<220>
<221> unsure
<222> (112)

<220>
<221> unsure
<222> (128)

<220>
<221> unsure
<222> (202)

<220>
<221> unsure
<222> (209)

<220>
<221> unsure
<222> (215)

<220>
<221> unsure
<222> (230)

<220>
<221> unsure
<222> (408)

<220>
<221> unsure
<222> (489)

<400> 1215
gaattcgcgg csgngtngac aactgggtga ggcggggcan gggttcctgg agagagggca 60
gcgaggatct ctatcctggc ctggggatta tgaacatang tanccggggc anggccctgg 120
gtgggacngt ggcctccact ggcctcacca aagtgcctgg gccccaatcg ttctccatgc 180
ccagggggccc caggtggggc anacctctng cctgntcctc agccctactn atggggacat 240


```

tcaggacaccc ccatgaagtg ggcgggggag catccaaccc ctgctagccg gcagctgtgg 300
ccctgatcaa atcagggggt ggggagggaa agtgggtcca ttgaggtggc cctgctccat 360
cagccccccta cgggacttgt gttcattaca gtgagggggg gctcccantg tctcccgcc 420
tcctaatgc tccctttgct gcaggagaa gggttccaag atcacaaaat gtcaacaatg 480
ctggcctcnt gcaccaaagc tcgag 505

```

<210> 1216

<211> 263

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (211)

<220>

<221> unsure

<222> (222)

<400> 1216

```

gaattcgcg cgcgctcgac cctcaccgag ctgagcctct cgggttgatc caaggtcacc 60
gacgacggcg tggagctcgt ggccgagaa ctgcgcaagg tgcgcagcct tgacctcttg 120
tggtgcccac gcatcaccga catggcgctg gactacgtgg cctgcgacct gcaccgccta 180
gaggagctcg tgctcgacag gtgtgtacgc ntcacggaca tnggcctcag ctatctgtcc 240
accatgtcgt ccctccactc gag 263

```

<210> 1217

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1217

```

gaattcgcg cgcgctcgac taaaggctct agaagaggat tatggcctat ttgtaaagct 60
gagggaggct cagagtagct taatgctgcc tggctgggct ggaggcagg actgagggcc 120
tgtaattgtt ctggggcaat ggggagccat agagggtgtg tgagcagagg caaagccaa 180
tcagactagg agcaggggaa agatgctcac ctgggctcct ctgctggccg cactccacg 240
gaatggtaca aactcttcac ggccaccagc cactcccga gcacagttga cgtgttatec 300
atgttgttgt cgtatgccac ccatagcgcc gtgcgctccc gcgggtgccc cagccgctcg 360
ag 362

```

<210> 1218

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1218

```

gaattcgcg cgcgctcgac cgccaagatg aaccgccaga gaaccaactc catcgggcac 60
aaccaccac actggggggc tgagcgcccc ttctacaacc acctgggtgg caaccaggtg 120
tccaaggaga tgaagcggat gggctttgaa gacccaagg acaagaacgc ccaggagagt 180
gcgaaccctg aggatgaagt ggatgagttt ctgggcccgt ccattgacgc caggagcatt 240
gataggcttc ggtctgagca cgtccgcaag ttctctctga ccttcaggga gcctgactta 300
gagaagaagt actccaagca ggtagacgac cgatttggtg cctatgtggc gtgtgctcgc 360
ctcgtcttcc tcttcatctg ctttgtccag atcaccatcg tgccccactc gctcgag 417

```

<210> 1219

<211> 290

<212> DNA

<213> Homo sapiens

<400> 1219

```

gaattcgcgg ccgcgtcgac cttcttttaa aaatatttta agagtattag taaactttgc 60
cctcataaatt tagaatgtca tttctgaaac gaatccacca cttctgggtc tgtgtgaaga 120
atcactcaaaa gcaggtttta aatgcagatt ttctgggcca gtcatgggtg ctcatgcctg 180
tgggtcccggg actttggggc gggcggatcg cttgggggtcg ggagttcgag gccggcctgg 240
ccaacgtggc aaaaccctgg ccaacgtggc gggatcccg cttatctcgag 290

```

<210> 1220

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1220

```

gaattcgcgg ccgcgtcgac gagcatagat ggaattccaa aatatgtaca ttcagctgtt 60
tgggtttttcg tttttcattg ttattattgt gagaatgctg ttattggggg tgtgtgtgag 120
tgcccgtcag ccagtgatgc ctccggccac gctgtggggc cacctcagtc ctgcctgggt 180
cctggtgcct tggacccccc gtgcttgtgg ccaggctgcc cttgcccgag cccggggccc 240
ccatgatcac cgctcgcagc agccgcgcgg acgccccat g 281

```

<210> 1221

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1221

```

gaattcgcgg ccgcgtcgac ctttttgccg tttcttggtg gctgtttaag tgatatttac 60
cttagtagtt tcccaggggt taaggccgct tcagtattaa ggctagatca gagagtttcg 120
ttctgttgct gttgctcaat caatttatgt cgttacatcg tttgtggatc atggctatgt 180
gcctgggtcct tggccaggag aaggggcagg aaagtgatag tacgaagatg actaacacag 240
gacctgtgcc tttaggagtt gatgtacgtg atgaattagt caagtcatgc atggtggtga 300
gggccatata aggggaaagt gttactggaa aactcgag 338

```

<210> 1222

<211> 409

<212> DNA

<213> Homo sapiens

<400> 1222

```

gaattcgcgg ccgcgtcgac attttatgat aaaaatgaaa ctgagttggt tggatgaatgt 60
cactggagct atcagcattg ctggaattca ttggtaccat ggcacagaag gctacgtgga 120
gcctgattgc ctttgccttg ctgtttgctt tgataatgga agatgccaaa taatgagaca 180
tgagaatgac caaaatcccg ttttgattga cactggcatg tacgtagtag gcatccagt 240
gaaccacatg ggcagcgtgt tagctgtggc aggcttccag aaggcagcca tgcaggacaa 300
agatgtgaac attgtgcagt ttacactccc gtttgggtgag catctgggta ctttgaaagt 360
tcctggaaag gaaatatctg cactatcttg ggaaggagat ggactcgag 409

```

<210> 1223

<211> 291

<212> DNA

<213> Homo sapiens

<400> 1223

```

gaattcgcgg ccgcgtcgac ggtcactact attgagtttc ttccttaaca ctgattaaat 60
gatcttaact ccctcagcta aaactggcat tactgactcc cagctatatt tctccagact 120
tgcatttttt tttttttttt ttgagacag ggtctcactg tcgccagggc tggagtgcag 180
tggcgtgatc tcagttcact gctgctttcc ctctgggct caagcagttc tcccacctca 240
gcctctcgac taacagggaac tataatcttg cagcactatg ccgacctcga g 291

```

<210> 1224

<211> 324

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (47)

<400> 1224

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacntgc ctcgaggacc 60
cctagctccg acatgtcgcc ctctggtcgc ctgtgtcttc tcaccatcgt tggcctgatt 120
ctccccacca gaggacagac gttgaaagat accacgtcca gttcttcagc agacgcaact 180
atcatggaca ttcaggctcc gacacgagcc ccagatgcag tctacacaga actccagccc 240
acctctccaa ccccaacctg gcctgctgat gaaacaccac aaccccagac ccagaccag 300
caactggaag gggtttggt ctag                                     324
```

<210> 1225

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1225

```
gaattcgcgg ccgcgtcgac atcaccctta attgttctac ctataaaatc aattcagagt 60
aattctaaac ttccccact ctcaccatgg tcttctgtcc ttccatcttg cattgcatgt 120
ccttttttgc ccactgcagc cattcttcga cctctagtcc ttgactcct gtactttctc 180
ccaagtgctt tttgtttttg tttttgtttt tgtttttgac ggagtcttgc tctgtcgccc 240
aggctggagt gcagtgggtg gatctaggct cactgcaagc tccacctccc ggattcacgc 300
cattctcctg cctcagcgac ctcgag                                     326
```

<210> 1226

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1226

```
gaattcgcgg ccgcgtcgac cttattacaa aatcaaaccct gcattgcaatg atcaaagctg 60
aagaaagcag taagcaagaa gactgcacca caacatcaac agccccagtc cctacaacag 120
aaattccgac cacaatgagc accatggctg ctgccgaagc agcagctgct gttgttgag 180
cagcagcagc ggcagcagca gcagcagctg cagccaatgc taatgcttcc acttctgctt 240
ctaatactgt cagtggaaact gttccagttg ttcttgagcc tgaagttact tccattgttg 300
ctactgtttg agataatgag aatacagtaa ctatttcaac tgagggaaca gcacaactta 360
ctagtacccc tgctattcag gatcaaagtg tggaagtatc cagtaatact ggagaagaaa 420
catctaagca agaaactgta gctgatttta ctcccaaaaa agaagaggag gagagccaac 480
cagcaaagaa aacatacact tggaatacac agctcgag                                     518
```

<210> 1227

<211> 733

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (3)

<220>

<221> unsure

<222> (12)

<220>

<221> unsure

<222> (20)

<220>
 <221> unsure
 <222> (28)

<220>
 <221> unsure
 <222> (46)

<220>
 <221> unsure
 <222> (82)

<400> 1227
 ganggatttc cnttttaaan ttagcaangc ctagcatttt tgggtnattt gccgggggttg 60
 agactataac ctaactggaa anttttattc atcattttta ctggaagatt gtgggtttaag 120
 actgtaactg tggggtaggg ggggtggcct atgcctgtaa tcctagcact ttgggaggct 180
 gaagtgggga ggatcactgg agcccaggag ttctaaacca gcctgggcaa catagggaga 240
 cctgtctct acaaaacaaa acaaagacca taactatgga aaaacctaata gctacagtaa 300
 ctgatgtcat tcatgtaact catgttgtgt aatgttttcc tagaaatttc aaggtaaaga 360
 tgtcgggggt aagtgtttga tatatcccag tcaactgtgac agttttgact cttcacgcct 420
 ccaaaaattg ttttcagccc agaaacattt gagaggcttt taaagtggaa agaactgcct 480
 ttatacaatt tacaatatcat ttctcttccc tccgaagaca cagatgacag gaaaatcact 540
 tactccatta aagttccttt tcagaattaa tctgggctgg agccacaaag aattttgttt 600
 tggtcctctt aaagccaaag gtcataagtaa tatataaaca gaatggaatg ttttgcatta 660
 atgacatgtt tgagaaaagt aatttaagct tttgcttttt agatgtcata cttgtaacac 720
 cacagatctc gag 733

<210> 1228
 <211> 488
 <212> DNA
 <213> Homo sapiens

<400> 1228
 gaattcgcgg ccgcgtcgac gaagaggaag aaccaatgga tacttccagt gtaactcaca 60
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 atgaaatatt tcagacagga ttggtagctt atgtcgatct tgatgaaaga gcaattgatg 180
 ctctcaggga atttaatgaa gaaggagctc tgtctgtact acagcagttc aaggaaagtg 240
 acttatcaca tgttcagaac aaaagtgcac ttttatgtgg agttatgaag acctacaggc 300
 agagagagaa acaggggagc aaggtgcaag agtccacaaa gggacctgat gaagcgaaga 360
 tcaaggcctt gcttgagaga actgggtata ctctggatgt aaccacagga cagagggaagt 420
 atgggtgggtcc tccaccagac agtgtgtact ctggcgtgca acctggaatt ggaacggagg 480
 aactcgag 488

<210> 1229
 <211> 756
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (28)

<220>
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<220>
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 <222> (61)

<220>
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 <222> (80)

<220>
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 <222> (85) .. (86)

<220>
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<220>
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 <222> (375)

<220>
 <221> unsure
 <222> (398) .. (400)

<220>
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<220>
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 <222> (669)

<220>
 <221> unsure
 <222> (719)

<220>
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 <222> (727)

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 agagcaagag gaagtcaggg ggaaatgagg ttagcattga ggaacgtctg ggagcaatgg 180
 atatngacac acacaaaaag gaaaggaaga cctccagacg aatagctttc cagttcttct 240
 taccacagggc ttagaaaagta acgattttga aatgctaaat aaagtacttc aaactaggaa 300
 tgtaaaccctt ataaagaaga ctgtattaag gatgcccctg catactatta ttccgttggt 360
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 gctaaaatgt gtgttaacag ttcattgcac atacctgtcc acgttgccctg acctggcccc 480
 cagctgggga cactctacca gttaattggaa agcagagtca aaacttttca gaaactttca 540
 caccttcatg gaaagcttat tcttctaatt acacaagtaa cagcatcaga gaagacaaag 600
 ggagcaactt cccctggaca gaaggcaaag ttggtgtatg aagaagagtc ttctgaagag 660
 gagtctgang atgaaatagc agataaggat tctgaagata attgggatga agatgaggng 720
 gagagtnaaa gtgaaaaaga tgaggacact ctcgag 756

<210> 1230
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1230
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 gaaattgcta cagagaagaa aaatagtcta aagagggata aagccattca gggtttaacc 180

atggcattaa aatcaaagga aaaaaagggtt gaagaactta actctgaaat tgaaaagctc 240
 agtgcctgcct ttgctaaagc cagagaggcc ctacagaaag cacagaccca ggaatttcag 300
 gggctctgaag actatgagac tgctctatca ggaaaggaag ccctttcggc tgcgctgcgc 360
 tcacaaaacc tcaccaagag tacagaaaac ctcgag 396

<210> 1231

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1231

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 acacagagga gagcgacagc ccagatagcc acttggacct ggaatccaac gtggagagt 180
 aggaagaaaa cgagaagcca gcaaaagagc agaggcagac tcctgggaaa gggttgataa 240
 gcggcaagga aagagctgga aaagctacca gagacgagct gccctacacg ttcgcagccc 300
 ctgaatccta tgagggaactg agatctctgt tgtaggaag atcgatggaa gacgagctcg 360
 ag 362

<210> 1232

<211> 170

<212> DNA

<213> Homo sapiens

<400> 1232

gaattcgcgg ccgctgcgac aacactgata acactcagaa aaccacagtg tgttttcata 60
 tttggaactt tgtaatagcg ggagtagcag tagtccaaac ctagtatagg gaaaggataa 120
 aaataagtca ccttcaccaa gagatgccaa tgattaccaa acaactcgag 170

<210> 1233

<211> 317

<212> DNA

<213> Homo sapiens

<400> 1233

gaattcgcgg ccgctgcgac gacatctcca tggagatccc ccaagaattt cagaagactg 60
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 cctgcctggc cagcttctgt gtggaaacca acaatggcgc aggcctttggg ctttctatcc 180
 tctgggtcct ccttttctact cctgtctcct ttgtctgctg gtaccgcccc atgtataagg 240
 ctttcgggag tgacagtcca ttcaatttct tcgttttctt cttcattttc ttcgtccagg 300
 atgtgctcgg cctcgag 317

<210> 1234

<211> 301

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (75)

<220>

<221> unsure

<222> (98)

<220>

<221> unsure

<222> (106)

<220>

<221> unsure
<222> (141)

<220>
<221> unsure
<222> (244)

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acgggtcaaca atgggnactgt gttaccaaag aaacctantg gctctntacc atccccctcc 120
gggggtcagga aagaaactgc ngtgccagca accaaaagta acatcaagag gaccagctct 180
tctgaacgag tgtctcctgg gggtcgaagg gaaagcaatg gggattccag aggaaaccgg 240
aatnggcaca ggctccacca gcagctcttc cagtggcaaa aagaacagtg aaaagctcga 300
g 301

<210> 1235
<211> 346
<212> DNA
<213> Homo sapiens

<400> 1235
gaattcgcgg cgcgctcgac gtggagggtg gtctttggaa gtgatgaaga tgaatcgctc 60
ttgggcaggc acctacctgc ttccagagat cttttgccta ggttttcaa agcctcactt 120
aaactttttg cttttgcttt gctggaaggt aaactcagcc tgcgggtttc taagccctga 180
aggccaccag gactcgcagg acccctctg tacatgttca tggccagga gtccgggagg 240
cacatccggc gaggttggt cctgggactc aggcaatatt cccgatgaag ctgatcaaat 300
cggatttcaa tctccctctg acggttctct ccatggcccc ctcgag 346

<210> 1236
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1236
gcctcaagaa agccctggaa cgaagtgata agtatataga ggaactagaa tctcaagttg 60
cacagctaaa aaattcaagt gaagagaaa aagctatgaa ttccatttgc cagacagcac 120
ttctctgcaga tggcaaaggg agcaaaggca gtgaggagga tgtggtgtca aagaatcaag 180
gcatagatgc cagaaagcag cctggctcat ccacctccag ttcttctcac ctagegaagc 240
cttccagcag cagactgtgt gacaccagtt ctgcaaggca ggaaagtacc agcaaagcag 300
accttaactg ttctaagaac aaagacctat atcaagaaca ggtagaactc gag 353

<210> 1237
<211> 856
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (62)

<220>
<221> unsure
<222> (123)

<220>
<221> unsure
<222> (182)

<220>
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<222> (202)

<220>

<221> unsure

<222> (418)

<220>

<221> unsure

<222> (447)

<400> 1237

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cantgcccca ggagacagat ggccagtttc ttccctgtgc accggagccc acggaccctc 180
ancgactttc ttcttctgaa gnagactgag agcactcagt gctgcccagg gagccctgtt 240
gcacagactg aaagtccctg tgatttgtca agcatagtgt aggaggagaa tacagaccgt 300
tcctgttaga agaaaaataa aggcgtggaa agaaaagggg aagagggtga gccagcacct 360
attgtggact ctggaactgt atctgatcaa gacagctgcc ttcagagctt gcctgatntg 420
tggagttaaag ggcacggaag gcctttngtc ctgtggaaac agaaatgaag aaactggaac 480
aaaatcttct ggaatgcca cagaccagga gtccctgagc agtggagatg ctgtgcttca 540
gagagacttg gtcacggagc caggcacagc ccagtattcc tctggagggt aactgggagg 600
catttcaaca acaaagtga gtaccccaaga cactgcaggg gaaatggaac atgggctcat 660
gaaccagat gccactgttc ggaagaatgt gcttcaggga ggggaaagta caaaggaaag 720
atttgagaac tctaatttg gcacagctgg agcctctgac gtgcacgtca caagtaagcc 780
tgtggataaa atcagtgttc caaactgtgc ccctgccgcc agttccctgg atggttaaaa 840
acctgcgagt ctcgag                                     856

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<210> 1238

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1238

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gaattcgcgg ccgcgtcgac atgcttcata tgcattgggt gaggtctcct ttgtttctg 60
tttccatctt gcatggggta ggggtgggga gacggcaagg gaactgcttg atttatttaa 120
tatataattc ctctaactgt gatcttcatt ttataggttt tagcttttaa ttgttgcat 180
tacttcttgc atttaattag tagatgtttt cttttgggt ccagcttaga ttttttatgc 240
tgtaataaaa atggcacctc atcaagtact cttttgggtt agttggagtt tacttgcaaa 300
attagtctcc ttgtatgggc agtcgtgtga atcattcttt gttcacgaaa cgctcgag 358

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<210> 1239

<211> 623

<212> DNA

<213> Homo sapiens

<400> 1239

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gaattcgcgg ccgcgtcgac caaattctta tgactttgtg gttttataga tgttctagaa 60
actttgtatg taggtatcta caaaattagt tcattcccct gaatattttt gcattcatat 120
ttttgagggt ttgatgtttt cagcctctgg cgaatctttt tcattgaatt tgaaccattt 180
gtaaaatctg tgatgctgaa gcagagtgtg tcacaaagt atgagaacat tactaaaatc 240
cacggacgca ctgcagaccta agggctcaac ggctgactcg gcagcgggca gccacccac 300
gtccccctgc ggtcactcgc acaccacagc ctgaagctcc cccagcgcct gcacctcgca 360
cacagctaag gtcaaagtgc aaacgcactc cacacggaag ctcatctat acccgaagag 420
cagtctcaga aagcaagatt acttttgtgt tttttaaaa atgattcttt aatgtatttt 480
tctaaacatt ctgattggaa gtagtggatt cctaaatgat tccaaagtca cctgtaattc 540
ttctgttttt gttttgttct gtcttttctt catttttggt ttgggtgggg ggaggggcag 600
gtgacacaaa ggacgagctc gag                                     623

```

<210> 1240

<211> 323

<212> DNA
<213> Homo sapiens

<400> 1240
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aggtagactca tgtgtcttct agtcagtctg gttgtagcat tgccagtgc tctggaagca 120
gcagtttatac tgatatctat caggctacgg agagtggagt aggagatgta gatitgacac 180
gtcttcacaga aggacctgtt gattctgagg atgacgaaga ggaagatgaa gagattgatc 240
gaacagatcc attgcagggg cgagatcttg ttcgagaatg tcttgaaaaa gaacctgcag 300
acaaaactga tgatgacctc gag 323

<210> 1241
<211> 168
<212> DNA
<213> Homo sapiens

<400> 1241
gaattcgcgg ccgcgtcgac cagaatgcga ttcttctgcg gttcggttcac cttgcccccc 60
aggcagcagt gtgatagggc attgtggatg atgaacttgt tggacttggc gctgggttct 120
ttgtacagcc gtggacctgt gtactcgggc actgacgctg ttctcgag 168

<210> 1242
<211> 428
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (52)

<220>
<221> unsure
<222> (113)

<220>
<221> unsure
<222> (412)..(413)

<400> 1242
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aagcaaatag gcaacttcaa gatccttttag taatcatgac aggaaacatc cnacatggc 120
ttactgagct aggaaaaacc tgcccatttt tctttccttt tgataccggg caaatgcttt 180
tttaagtaac tgcatttgat cgggaccgag caatgcaaaag attacttgat accaaccag 240
aaatcaacca gtctgattct caagatagca gagggtgcacc tagattggat agaaaaaac 300
gtactgtgaa ccgagaggag ctgctgaaac aggcggagtt tgtgatgcag gacctcggca 360
gctcacgggc catgttagaa atccagtatg aaaatgaggt tggtacaggt cnnggggtctc 420
cactcgag 428

<210> 1243
<211> 735
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (65)

<220>
<221> unsure
<222> (443)

<400> 1243

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acaantccca gcatccagc tgcctgcccc tggcctggcc tcctgctccc caaccccagg 120
catcttcccc ttctccacat gcggttggcg caagccaggg gggaatcaga gccccctac 180
agactcgaag gtgggcttgt ttctgtgacc tgcaagcccc cttccacact gacttccatc 240
ctctctcttc ccctcgcttg ctgtgctgtg gccatgctgg ggtcctgctt gcacttccca 300
cggatgattc tcagcacatc ccatcagttt cacttttgaa gctgccctcc tgggctgctc 360
ccaccatagg ctgctcatg cattccctct tctcagatgg ccgtgccttg cgcctcactc 420
ctgctctccc tccagggtc atntcagatg tcccctcctt gccagggtc tccctggcca 480
cctggccaca cgctcactcg cactgctgtt tcttagtggt tctcagtggt tgtagcttat 540
ttcttgttgt ctgtggtccc caccatagac tgtgtggtta tgtttgtctt cattcagagc 600
accatgcccc gagtccacga ggccctggca cagaggcagc caccaggatg tggttgttta 660
aaaatagat gggagtgtgt ctcttcgatg gcttctgtc cgtggcagtt ctgggggtccc 720
ccccaccgac tcgag 735

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<210> 1244

<211> 576

<212> DNA

<213> Homo sapiens

<400> 1244

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gaattcgcg cgcgctcgac cgtcgattga attctagacc tgctcgaga tttgatgccg 60
tggtctctct ggaccagttt taagccatct cttctgttgt ttctttcttc ccaaagatgt 120
agacttttcc acttaaaagc atttccaaga ttctattttt tcatcctttt ttctgtccct 180
attctctttc actccccaca cttgttctta gctgtctctt gttgctctga tgtecatgtt 240
gatgggtggc gtcttcaacc atgccatccg tgtgccaacc cagcactttc ctgccatccc 300
tgtagccctt gccccaacat ctgtgcattt gactcccctt ctctgaccga ggctgtctcc 360
catccctctc tctaccaact catcccttct ctcccactg ccctttgtgc tgccccccac 420
aaccacacca ctcagggtct cagctcttgg gatcacattg acacaccccc acattttaca 480
ctctgtggcc cattgcttct gagctgtatt gtccagcacc atgaggaccc caccatgga 540
gacactgggt tttgtaccat cccagacca ctcgag 576

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<210> 1245

<211> 756

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

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<222> (81)..(82)

<220>

<221> unsure

<222> (85)

<400> 1245

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gaaactctat ttctgttctg nnagngccaa ttccacctat tgtattactt cgttaccat 120
tcgagctgtg tagtcagtca tccataggat tctttttgtt agacacaaag tagaaaccag 180
ctgttggccg ttgagacaag taggaatctt aggaaatgtt agcctgccag ttctactttt 240
tcctaactac ctgcctcacc acccccatca aatgggtggtc atgttttttg tcaccacca 300
ttcaggggag atgctatcaa cgaaccacgc tggctacaca caaatcctt ttctcagat 360
gatattaatc atctttgcct taaaaactga agctctacca agtttttact atgagagaaa 420
aaaaattaca acacctagcc ttgtagttaa caccacaact gactaatgga agttgacaag 480
atctaaatgc ttatacaaac tatcccaagg tcacaggaaa ttaatggcaa tattatacaa 540
ggttagggta gttcactttc tataggaatt tggattttac ttcttaaact acaatggaaa 600

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tgtctcaggc agtctgcttt gggaaatgtat tcttgaataa tactgatttc tcattgaagg 660
 aaaaaaacact atatccaaca actcagatat ggcagaagtg aagtcaatgt tccgggaagt 720
 tcttccaaag caaggatatgt acaccacaaa ctcgag 756

<210> 1246
 <211> 539
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (11)

<220>
 <221> unsure
 <222> (17)

<400> 1246
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 tatatgagaa gagtgtcaca attattaata aaactgcttt gatcatgtat tgtaaatctt 180
 gtccctcaac ccaaatccac cttcactctg taagtagtgc aatacttgtt tcatttctgt 240
 gtttaaactt ctgagcagtg agacatccct gtgagcagat acaatagcca atgcaagaat 300
 ctgtgtgttc cttgctgtac gttagacatt tgtaaaactgg attctgattg tcagttttat 360
 gagagcaata gcttccttaa agagataagt catatttacc tagtttgtat tttcctactt 420
 tagtgacctg aagatgcctg ataatttcat tcagaagaat ttttgaaagg tagtcttact 480
 tctttttagt ttttatagct tagcattagt gacttatttc aaaagaccca aatctcgag 539

<210> 1247
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 1247
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 agcaggacaa agagcaagga ttactgcaa gtaatatctt catatgaggc acagaatgat 180
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 aagttacttc caccggactt tgaaaaggaa ggggaatagac ccaagaagcc accgcctcca 360
 tccgctcctg tcatcaaaca aggggcaggc accactgaga gaaaacatga aattaaaaag 420
 atacctcctg aaagaccaga aatgcttcca aacagaacag aagaaaaaga aagaccagag 480
 agagagccaa aactggattt acagaagccc tccgttctctg ccataccgcc aaaaaagcct 540
 cggccaccta agaccaattc tctcagcaga cctggcgcac tgcccccgag aaggccggag 600
 agaccggtgg gtccgctgac acacaccagg ggtgacagtc caaagattga cttggccggc 660
 agttcgctat ctggcatcct ggacaaagat ctctcggacc gcagcaatga catactcgag 720

<210> 1248
 <211> 123
 <212> DNA
 <213> Homo sapiens

<400> 1248
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 atttattttc tcaaagtatt attctccatt tgggcagtg taaagatgag aaaaacactc 120
 gag 123

<210> 1249
 <211> 193
 <212> DNA

<213> Homo sapiens

<400> 1249

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaata ctagcccagt ccattctcaga 60
cactctcccc taaaaactct gggtcacatta agctcactgt cctctcaact tctgtgcacc 120
tttgcataag ctggtctttt tactcagaat gctctccttc ctctttgtct taataacatg 180
ggctatcctc gag 193

<210> 1250

<211> 661

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (36)

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<221> unsure

<222> (123)

<220>

<221> unsure

<222> (172)

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<222> (191)

<220>

<221> unsure

<222> (283)

<220>

<221> unsure

<222> (289)

<220>

<221> unsure

<222> (296)

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<221> unsure

<222> (309)

<220>

<221> unsure

<222> (321)

<220>

<221> unsure

<222> (368)

<400> 1250

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atctkgcaaa gttctgtaat tctaagtgtt gtgctatatt tcctctggag aagggttatta 120

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gantctccat tgcgtttctc tttctccatc tctttccctt gaggttagga gncagggttaa 180
aactcagaga nctcccaata ataatgggtt aaaaacatca ggggcttcct gtatctcctg 240
tcaggaagcc gaggaataag caggctgggg ctggtgggcg tcnacatcnc agtttngttc 300
tatctttteng tcccacctgc nctgggatgt ggcttctaca ctccaatttg cttcttggtt 360
tcaagacngt ggtgttcttt ccatagctga gcagattatt ttgagaggtg ggtgatatgt 420
gagagagaaa tctggaacct tcttctgggt agatacagga taagatagat acagggtaaa 480
atgttgagca ctttgtacat gctttgagag cataatcttt gtcactctgt tttttccctt 540
agacaatatc aggttacgt caacattaat ccatttaaaa ggacatggac tgttgccatt 600
aatacttttg gattccatat aacccttaac acaataactt ctagaaaatg tgtgtctcga 660
g 661

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<210> 1251

<211> 534

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (68)

<220>

<221> unsure

<222> (91)

<400> 1251

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cgtaaagaag aggaacgatt ggaacaagaa aaaagagaaa ggaaaaagca aaaagaaaaa 180
gaaagaaaag aacgcttgaa aaaagaaggg aaacttttaa ctaaatccca gagagaagcc 240
agagccagag ccgaagctac tcttaactg ctacaagctc aggggtgtga agtgccatca 300
aaagactctt tgccaaagaa gaggccatt tatgaagata aaaagaggaa aaaaatacca 360
cagcagctag aaagtaaaga agtytctgaa tcaatggaat tatgtgctgc tgtagaagtt 420
atggaacaag gattaccaga aaaggaagag acaccacctc ctggtgaacc agaagaagaa 480
gaagatactg aggatgctgg attggatgat tgggaagcta tggccggact cgag 534

```

<210> 1252

<211> 635

<212> DNA

<213> Homo sapiens

<400> 1252

```

gaattcgcgg ccgcgtcgac caatttcttc agccttctac atcctctaca atgtcagctc 60
aggctcattc gacatcatct cccacagaaa gccctcattc tactcctttg ctatcttctc 120
cagacagtga acaaaggcag tctgttgagg catctggaca ccacacacat catcagtctg 180
ataacaataa tgaaaagctg agccccaac caggacagc tgaaccagtt ttaagtttgc 240
actacagcac agaaggaaca actacaagca caataaaact gaactttaca gatgaatgga 300
gcagtatagc atcaagttct agaggaattg ggagccattg caaatctgag ggtcaggagg 360
aatctttcgt cccacagagc tcagtgcac caccagaagg agacagtga acaaaagctc 420
ctgaagaatc atcagaggat gcgacaaaat atcaggaagg agtatctgca gaaaaccag 480
ttgagaacca tatcaatata acacaatcag ataagttcac agccaagcca ttggattcca 540
actcaggaga aagaaatgac ctcaatcttg atcgctcttg tggggttcca gaagaatctg 600
cttcatctga aaaagccaag gaacgaaaac tcgag 635

```

<210> 1253

<211> 319

<212> DNA

<213> Homo sapiens

<400> 1253

```

gaattcgcgg ccgcgtcgac cgattgaatt ctagacctcc ctcttttctt tctttttctt 60

```

```

ttttcttttc tttttttctt tttttcttct tttttctctt cctctttctt ctttctttct 120
ttctctctct ttcttctctt ttctctctct ttctattaaa aaaatgggtat aattctacac 180
aaactggcca aaaacttggt ttatttgctc gcccttctag gtcaatatgt acaaatctac 240
tttcttattt ctattggcca gccagtgtac ttttgcttgg atgtttcaga aattatttaa 300
ccattctctt actctcgag                                     319

```

<210> 1254

<211> 615

<212> DNA

<213> Homo sapiens

<400> 1254

```

gaattcgcgg ccgcgtcgac agctttttaga aaaggaaaga ggaaaagaac agagacaatg 60
gactcagaaa atgcaaatag tgacatggat aaaggacaga gagaccata ttcgggaaat 120
gcctttctgc ctggtgaaag ctccagttag gatgaagagc ctttagcaga attgtcaaag 180
gaagaattgt gcgcaaaaat aaaaagcctg aaagaaaaac taacaaacac ccggaaagaa 240
aacagccgac ttcgacagtc tttggtcatg cttcaagtgt taccacaagc agtcacccag 300
tttgaagaat tgggtgggtat ggccgaggct ctgcttaagg gtgggggaac catgtctaca 360
tctgcacca cctcttggag agcaacaaac aactcctcgc cagattcatt tgcctcaaca 420
tgcagttaatt ctaattctaa ctccagttca ccagtttctt taaagcctga ggaagagcat 480
cagactgatg agaaacagtt ccagattgaa aaatggcaga ttgcccggtg taacaagagc 540
aagcctcaga agtttattaa tgatttaatg caagtacttt acacaaatga atacatggcc 600
actcacaacc tcgag                                     615

```

<210> 1255

<211> 454

<212> DNA

<213> Homo sapiens

<400> 1255

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc agagtgaaga 60
aagctggtaa tagatgtctg acaaaactaaa gaaagacttg tgttaccaca attcagacag 120
cccgaatat caagattcat ctttttctact aattgtggca ttcacagatc agaacataat 180
acctgaaaat ttgccagcac caacagacaa atgtaaacta aaatatcagc aatgtaaaac 240
tgaaattaaa gagggctata agcagtatag tcagagaaat gcagaaaata caaaatcaaa 300
tgttacacat aaacagtcct caagaaacaa gatagatgaa aagtgtgtgc aagatgaaga 360
agccaacaca gatgacctta cgactctgga taggaaagcc atcttacagc aagggtatgc 420
agacaactct tgcgataaac aacagaggct cgag                                     454

```

<210> 1256

<211> 682

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (130)

<220>

<221> unsure

<222> (143)

<400> 1256

```

gaattcgcgg ccgcgtcgac ggtatacttg aatgttgatt cctgcagcaa ttgttggttt 60
gtgcgttttc ttctatggat tatttacaat gaataatagt caagtaagcc aagaaatttg 120
taaagccacn gaagtcttta tgngccctct ctgtgacaag aactgctccc tgcagagact 180
caacgacagc tgtatctatg ccaaggtgac atatttgctt gataatggag ggacagtctt 240
ctttgtctatt tttatggcaa tatggggccac agtcttctct gagttttgga aaaggagaag 300
gagtatactg acctatactt gggaccttat cgaatgggaa gaagaggagg aaacacttcg 360
tccccagttt gaagccaagt attacaagat ggagattgta aatcccatca cgggaaaacc 420

```

tgaaccacat cagccctcct cagacaaagt cactcgtctt cttgtttctg tctcaggaat 480
 attcttcctg atateccttg tgatcactgc agtggttgga gttgtggtgt accgcctggg 540
 tgtcatggaa cagtttgcac cattcaagtg gaatttcac aaacaatact ggcagtttgc 600
 aacatctgct gctgctgtct gtatcaattt cataatcatt atgttgctga atcttgctta 660
 tgaaaaaatt gcttacctcg ag 682

<210> 1257

<211> 124

<212> DNA

<213> Homo sapiens

<400> 1257

gaattcggcc aaagaggcct actacgactg accagcaacc tccttttcct ttgtgtttta 60
 tatatcttta aaatatcttg tcagttttgc tatgtatggt ctccattca ccaccgcct 120
 cgag 124

<210> 1258

<211> 535

<212> DNA

<213> Homo sapiens

<400> 1258

gaattcgcgg ccgcgtcgac gaagaaaatt ctaagtccta ttggttaaag ggggaaaaaa 60
 agcatctagc tccagcttca ggcactattg aattcaggaa ttttgacaag ccaagggctg 120
 tcactctcca cctctccaca gtggttatct ctacttgatc ctactcaca agcacaccat 180
 gtccaagtgg tggaaaagat ggttcttggc aactccaagc ttacatctca tctcctttta 240
 gaaattctct tcccaactat tccagcaaga attccagatt gcagtctcat tggtagatct 300
 tatagtccat gcacatctcc aaatcaatca tctaattctt ggttgcccac tttagagcca 360
 gagggcaggg tcagccccc aaagctgca tagactatga acggaggcca gatcagggac 420
 ctcttacc aaatgtgttg tggataagca aaatctaggt tcttggttat aacaacaatt 480
 atagttaaag ctgtcacaga cattcaaacc tgtgctttct cccctccac tcgag 535

<210> 1259

<211> 533

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (35)

<220>

<221> unsure

<222> (54)

<220>

<221> unsure

<222> (63)

<220>

<221> unsure

<222> (74)

<220>

<221> unsure

<222> (80)

<220>

<221> unsure

<222> (118)

<220>
 <221> unsure
 <222> (132)

<220>
 <221> unsure
 <222> (151)

<220>
 <221> unsure
 <222> (158)

<220>
 <221> unsure
 <222> (170)

<400> 1259
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 canttgtcac tcanggtctn cctcaaaaatg gactgctttt ttagggtagt tgtgggantt 120
 gggattaggt tnggctattg ataactggaa nttcaaantg gctatgggtn aataaacaca 180
 caatgggttta ttctctctca aaaaagagtc tgaaggtagg tacacaaggt ctggtagatg 240
 aattttacga agtcatccaa aaaaacccca taattcttct gtctttctgg tctgctatcc 300
 caatacttgg cttgtatcct caaggccact ttgtgggtcca agatgggtgc tggagtttca 360
 cctccagttg aatgagttct agttgtagac taaaaaaagg aaaggtaaaa agttagaaaa 420
 gacttctca aaactgttgt ctcttacctt gataagtagc cttcccagaa acccttaaca 480
 cttctactta gatcttattg tacagaactt agtcacgtgg ccacagactc gag 533

<210> 1260
 <211> 512
 <212> DNA
 <213> Homo sapiens

<400> 1260
 gaattcgcgg ccgcgtcgac ccaagaagtg cagtggaaac gctctgtttg gctgaaagta 60
 ctgcaccaag gatgactgtg gaagagcaaa tggaaagaat aagaagacat caacaagcgt 120
 gcctgagggg gaagaaaaaa ggggttaaatg ttatcggtgc ttcagaccag tcacccttac 180
 aaagcccttc aaatttaagg gataatccat ttaggactac tcagactcga aggagggatg 240
 ataaggaact ggacactgcc attagagaaa atgatgtaaa gccagaccat gaaactcctg 300
 caacagaaat tgttcaacta aaagaaaccg aacccccaaa tgtggacttc agcaaagagt 360
 taaaaaaaac tgaataacatt tcatatgaaa tgctttttga acctgagcca aatggagtaa 420
 attctgtgga aatgatggat aaagaaagaa acaaagacaa aatgcctgag gatgttacat 480
 tcagccctca agatgaaaca cagacactcg ag 512

<210> 1261
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1261
 gaattcgcgg ccgcgtcgac ggaagcggag gaagctgatg aaagcagtga agaagaggac 60
 tgcactgcag gagagaaggg catttcagga tcaaaggctg ctggagaagg tagtaaagca 120
 gggctgtcac cagctaattg ccagagtgc cgtgtgaatc tggagaagtc tttgctgatg 180
 aagaaagcag ctctcccccac ttctgattct gggcattgca cagctgaaga ggtgtttgca 240
 tctgaagatg aatctgaaga agctcctca ctcagtgcag aggaagaaga ctcagaaaat 300
 gaagaggcta ttagaaaaaa gctttcaaa gctttctcaag tgagcagtgg tcagaaactg 360
 gggccacaga acttcattga tgagaccagt gatatagaaa atttactcaa agaggaagaa 420
 gattacaagg aagaaaaataa tgattccaaa gaaacgtcag gtgccctcaa gtggaaggaa 480
 gacctttcca gaaaggcagc tgaggccttt ctgaggcagc agcaagcagc tccaaacctc 540
 cgaaagctta tttatgggac agtgacagaa gataatgaag aagaagatga tgatactcta 600
 gaagagcttg gaggggttgt tcgtgtcaac cagcctgaca gagagtgtaa gcacaaggca 660

tctcgcgag

667

<210> 1262

<211> 734

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (340)

<220>

<221> unsure

<222> (625)

<400> 1262

```
gaattcgcgg cgcgctcgac aattctagaa ctgcctcccc atccaacggc actcacaaca 60
actcgtgtgct cccagttaca gcatcagccc caacatctct gcttcctaag aacattttcca 120
tagagtccag agaagaggag atcaccagcc caggttcgaa ttgggaaggc acaaacacag 180
acctctcacc ttctgggttc tegtcaacaa gcggtggagt ccacttaaca accacgttgg 240
aggaacacag cttgggcact cctgaagcag gcgtggcagc tacactgtcg cagtccgctg 300
ctgagcctcc cacactcacc tcccccaag ctccagcctn atcacctca tccctatcaa 360
cctcaccacc tgaggtcttt tctgcctccg ttactaccaa ccatagctcc actgtgacca 420
gcacccaacc cactggagct ccaactgcac cagagtcccc aacagaggag tccagctctg 480
accacacacc cacttcacat gccacagctg agccagtgcc ccaggagaaa acacccccaa 540
caactgtgtc aggcaaagtg atgtgtgagc tcatagacat ggagaccacc accacctttc 600
ccagggtgat catgcaggaa gtagnacatg cattaagttc aggcagcacc gccgccatta 660
ccgtgacagt cattgccgtg gtgctgctgg tgtttggagt tgcagcctac ctaaaaatca 720
ggcattctct cgag 734
```

<210> 1263

<211> 764

<212> DNA

<213> Homo sapiens

<400> 1263

```
gaattcgcgg cgcgctcgac aagggtcctt tatactgtcg gtctgtggga tctgccaggt 60
tatcaatttg acaccttaag ccatctcact caagaatagt acagatgtgt ggaatatgcc 120
aataccttta actccagaca tcatgttctc aagataaaag ctttttaaaa caaaaagcca 180
tcgtatgtct catcaacatg aaattggaat gcaaaattaa tactgtctgag gatttccctc 240
atatcccatg ctgttttaact atctattcta cagtcctaga atcaatcttt tttttaggag 300
acaaggtctt tgttacgaag gctggagtag agtggtgcca tcaaagctca gtgcagcctc 360
caactcctgg gctcaatcct tttgcctcag cctcccttc ctgagtagct gcaaccacag 420
gcacacgccc caataccag ctagttttta aatttttggt gagatgaggt gtttgttact 480
ttcttgccca ggctgggtctt gaactcctgg tttcaagcaa tacaccacc tcagtgtggg 540
gattgcagac ttgagccact gcacctggcc tggaaccaac ctttatggct atcaatactc 600
ccatcagtta actgtctcag gtatcataat atcccttctt atatgtatca aaactcatac 660
tgaacaatga gttctgggtt gcaaaaagta catattaaaa ttttaaatgc tgggcacggg 720
ggctcacacc tgtaattcca gaactttggg actacaggct cgag 764
```

<210> 1264

<211> 208

<212> DNA

<213> Homo sapiens

<400> 1264

```
gaattcgcgg cgcgctcgac ttgagattgc tattaagatc gtgctctact gtgatgattt 60
gggtttgttt gataatcaga aaaaagcata tccttttggg tgttcagcca cactgctttg 120
gtgtcacaac tgcacattgg ttccacagct gcaggacaag ttcgagcacc ttaaaatcat 180
tcaacaggag gagataagga agctcgag 208
```

<210> 1265

<211> 128

<212> DNA

<213> Homo sapiens

<400> 1265

```

gaattcggcc aaagaggcct agtcgattga attctagacc tgcctcgagt gcgatgttgt 60
tatctgacag ttctccgtcc ctactggcct ttctcctcgt cttcatatct gtacgggtaca 120
agctcgag                                     128

```

<210> 1266

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1266

```

gaattcggcc aaagataggg ctctttggcc gaattcggcc aaagaggcct aagaattcaa 60
tcgacgggtt aggggtggaat cggagctggt gtattgcctg ggggtgtctac tgcagatatt 120
tcacaaata aggatgatga agaaaactct atgcacacta cgggtgtgtt gttttctagc 180
agtgcacaagt tcactttgaa tcaggatatg tgtgtagtgt gtggcagttt tggccaagga 240
gcagaaggaa gactacttgc ctgttctcag tgtggtcagt gttaccatcc atactgtgtc 300
agtattaagg taaacatcct taaattgagt taacaaatat gtactgaatt tttatttggg 360
tttagtagta acatgagctc ccagttctca caattaagta ttatgattat taaacatatg 420
tgacagtatt taagcacttt aaatactgct ttaagggtt tcctatctcg ag 472

```

<210> 1267

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1267

```

gaattcggcc aaagaggcct acgaggtggg ggagtttatt aaattaatgt taattaagct 60
agtgttgggc aaatatacca tataaaagaa taggttgtga ttcatccta actaaggaca 120
gactacatat gaatgtccaa atggggctaa ttgtctttga gctaatatcc tacattctcg 180
ag                                     182

```

<210> 1268

<211> 171

<212> DNA

<213> Homo sapiens

<400> 1268

```

gaattcggcc aaagaggcct aagtttgcct agcacatcca ctccataaaa aacaaatcag 60
aaacccccaa ctaattatca aatactgact tatagaatac ctattcttga aataatggag 120
acaacacaca aaaaagcagg aaacagaaac acacgcaccc agacactcga g 171

```

<210> 1269

<211> 797

<212> DNA

<213> Homo sapiens

<400> 1269

```

gaattcggcc aaagaggcct agattgaatt ctagacctgc ctcaatttat ttttaaaatt 60
cacttacgta aatggaatgt gcttttactc ttcttaaaaa agcagcttct atatcacacc 120
cttgtttaca gaaaagctac atgtgctgca tgcagacttt gacacttaag tagcttcttg 180
gatcaaaatg gcttctagat actaaatgcc acttaattca gcactattct tggttgggtc 240
gtataagtaa cactttaaaa cttgcagctc tggaaagaca gaactttact aacaaagtag 300
aaagtgattt caaagtatct tccacaaaag attgtactgg taggcggttg acaacattct 360
gttcgatcta ctttcaaatt tctagagaaa atcatttttg aatactactg tactgattct 420
tggccttcgt tgtctctaaa agtgctgatt ttaacattat cttaaaactg tccagtttga 480

```

```

attgagcttg ttttcatcaa tatacatatt gaaaattcct ggtgtagaaa actcaacatg 540
tgc tgaatac ggggtgtact tcccttcaac tacctaaaag gctgaacttt tgttaaatct 600
taaagaaaatg gtcccaacag cttaacttca tttttttaat gatagttgaa tgtgttttcc 660
ataaaaaattt cttttaaaaa gaggcaactg attaaaaaca caacatggcc agcaccatta 720
tacaagtaat gttattgagt ttacaactga agttctgtaa aattgtttct agatcgacag 780
aatgtgtgca tctcgag 797

```

<210> 1270

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1270

```

gaattcggcc aaagaggcct aggcgggggg gttggaggag gaggcagagt tcacctgctg 60
aggcagctcg ctctcctttt tcattgatgg gctgtcactc agccgcagca ggatgggctg 120
gtctgaggtg ataacatttc cattcatgtg aagggtgcac ttcacgggct gcccgctccag 180
acaccggttg ttgtacttct tatatgcggt gatggcatcg tcctttttca caaacaccac 240
ctccgctacc ccaggatgga ccagtcgagc tcgcttgagg gccccacaca cacagaaaag 300
ctcaacaatg tcctctcag tgactcgag 329

```

<210> 1271

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1271

```

cagtggcctg agaggaagag accagcagga aggaaagatc ctcagcaaca aagtaaaacc 60
agaacaacag aggacctttc tgtgtaagaa tatttggtt tagaaggtaa ataaaataat 120
tatatttctt agaattttct gactatccct aaatcctgca ggtaaattat tcccaacaaa 180
ttttcaaaag gcaatcaata ataagtaggt tcttcttcaa taacatgagc atatgcttct 240
taaagactgg 250

```

<210> 1272

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1272

```

gaattcggcc aaagaggcct agagagattg acaagctgga cagcatggtg tcagaaggga 60
aagggtgacga gagctacagg gagctcttca gcctactcct gctggagaag gttgaacaag 120
aaacatggcg cgagaccggc atttcctttg tgacctcagt caccgcctc atggaacgtc 180
ttcttgacta cagggactgc atgaaaggag aggaaacaga gaataagaag ataggctgca 240
ctgttaacct gatgaatttt tacaaatctg agattaacaa ggaagaaatg tatatccgct 300
acatcctcga g 311

```

<210> 1273

<211> 127

<212> DNA

<213> Homo sapiens

<400> 1273

```

gaattcggcc aaagaggcct acgagttctt cctctttaca cgccactagg tcaccaaact 60
gtccctgaaa tttccacca acttgatgat ttactcctcc aagatgcttc cctacccccc 120
actcgag 127

```

<210> 1274

<211> 126

<212> DNA

<213> Homo sapiens

<400> 1274
 gaattcggcc aaagaggcct acttcagctg tcttggtgt agcctctcat tccccaaaa 60
 cagagaagga aataaatatc caaatctatc tctcacctga tgcggttcct ctccacgcat 120
 ctcgag 126

<210> 1275
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 1275
 gaattcggcc aaagaggcct agggaccatt tagttaccat gaaaagcagt tcctattgga 60
 aaggcaagtt aaatgtttct tttttgtgtg tgtgtgtgtt gttgttgaga gagtctcagt 120
 ctgtctccat ggctagagtg cagtgggtgca atctcagctc actgcaacca cagcctctcg 180
 ag 182

<210> 1276
 <211> 115
 <212> DNA
 <213> Homo sapiens

<400> 1276
 gaattcggcc aaagaggcct attttttttc ccctgaacta ttggaattct tatgggcttc 60
 tataacttat aaaacatata catgcatata aattttccag tgaacattac tcgag 115

<210> 1277
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 1277
 gaattcggcc aaagaggcct agatggtttt gaactggaac tgtggaccca tccacagacg 60
 tctatggggt ccagtgtgtg ttacaatttc aacctgggaa agccattctt catcttcctg 120
 tccactatgg tcagaagcta aactgtcgta agacccatgt cgagtaatgg gccaggact 180
 tccaggggga accaggccag caagcaggaa ctgataatac tgtactgcat ctgcagcgag 240
 gagcagaggg tggtttgcac taaacgggtg ctgcaattca ttccattgag gggtttctaac 300
 cagagtccag ctggctcgag 320

<210> 1278
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 1278
 gaattcgcgg ccgcgtcgac taaaattttt caccagagta aacttgagaa accaactgga 60
 ccttgagtat tgtacatttt gcctcgtgga cccaaaggta gcaatttgaa acatgaggag 120
 tacgattcta ctgttttgc tttctaggatc aactcgggtca ttaccacagc tcaaacctgc 180
 tttgggactc cctcccacaa aactgggtcc ggatcaggga aactaccac accaacagca 240
 gtcaaatcag gtctttcctt ctttaagtct gataccatta acacagatgc tcacactggg 300
 gccagatctg catctgttaa atcctgctgc aggaatgaca cctgggtaccc agaccacccc 360
 attgaccctg ggagggttga atgtacaaca gcaactgcac ccacatgtgt taccaatttt 420
 tgccacacaa ctcgag 436

<210> 1279
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1279
 gaattcggcc aaagaggcct acacgttttg gttttgttat cctgggttcac atcctccacc 60

gtggtgagga gaggtggtga gggcagcgtg ctggtgtctt gctctccact gctgtgtttc 120
 cttctctgct tgacagcagc aacgaggta ggcctgaaa acatggagaa caagctgtcc 180
 ccgttggtg aggatgtctc atcactcgag 210

<210> 1280
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1280
 gaattcggcc aaagaggcct atcgattgaa ttctagacct gcctcgagat ggggtgtgcg 60
 gctctcagcg ccgtttcaca gatgggaacc tgcacacag gcatgcagct ccgggttggc 120
 tcctcaccct ctccatgctg gcttgcacag gctaccagca tgggtgtgtac acgtgtgtgt 180
 gtgtgtctgt gtgtatcatg gtgtgtgacc tgtgtctgtc tgtactctg ttatttatat 240
 ccctttgtcg gttgtgctaa aagcatagat ttaaataca caagatgtaa tttagatggc 300
 tctactcgag 309

<210> 1281
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 1281
 gaattcggcc aaagaggcct aggaataata attgttgaaa aggtctctgc attttcattt 60
 tacataaggc cctgtgcatt atgtagttag tctaagaac atatatattt gcaacattaa 120
 agatcaagat tttctttaat ccaaattgta gggaaaaatg aattactatc cctataactg 180
 tacttttttt tcttttttct tccttctttt tttagagacag agtctcgctc tgtcaccagg 240
 ttggagtgcg gtggcgcaat ctacgctcac tccaacctct gcctcccagg ttcaagcgat 300
 tctcctgtct cagcctctcg ag 322

<210> 1282
 <211> 166
 <212> DNA
 <213> Homo sapiens

<400> 1282
 gaattcggcc aaagaggcct acacctgttc ccttttactt ttttaagcgc gcctgctata 60
 aaatatgaaa ttgcctgcat ggctccatt catggatcct attacatttc tatctgccag 120
 tgtaggttgg tgcagtcaca agacaatgct tcaggagaaa ctcgag 166

<210> 1283
 <211> 346
 <212> DNA
 <213> Homo sapiens

<400> 1283
 gaattcggcc aaagaggcct aattgaattc tagacctgca cgacacacac acgctctcca 60
 gtcccgggac tggagagcgt gtgtgtgtcg tgcaggcaga atgagtgttg ggaggaagcg 120
 ttgagagtgt ccaggaagaa ttgtgtcttt ttggagaga ccggaggtag gtgaagggat 180
 cctgaaggca gagactgtgt tcagggtggca ctgttttttt ggggggcggg gggggcaaat 240
 tggtagggcc ccacagcagt gaaaaggta tcagaagtgg agtgggatcc ccgagcgagg 300
 tgtcagtgct tgtggggggg ggataaatcc agtgcgggta ctcgag 346

<210> 1284
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 1284
 ggtgccatat ttggggtag tgtgttctgg actccatcag ataggggttc ttgtggcat 60

ctgtccagat tatctagatt tatagttaag taaaatagac atatatctat ttccctaaaa 120
 agtattattc gaagacagag acgaggaagg ttacccaaat agatggtcag gctcgag 177

<210> 1285

<211> 410

<212> DNA

<213> Homo sapiens

<400> 1285

gaattcggcc aaagaggcct agtcctgccc ccaaaattta caccataaat tttcgccata 60
 cttcactact ctttctcatt tttgtttttc cattattaat ataaaaagcc aggaatgtga 120
 ggtcttctga gaaagctgca ccatggtcaa gccattgtaa cctctgtgac ccacacgtat 180
 acatccagaa ggctccttgg agccagaaag tctaggacaa caggaaaacc acaaaagaag 240
 aaaaacagct agctgctgtc ttagcttatt agccaacctt gcaacattct accattgtaa 300
 cagactctac cctaactgat ctatcaacct tgtgacattg tgcctgtga cccttcccgc 360
 ctgtgacccc ttccccctca atagatgagc aggtctagaa ttcaatcgag 410

<210> 1286

<211> 143

<212> DNA

<213> Homo sapiens

<400> 1286

gaattcggcc aaagaggcct agtctatttc caaagcttta ttgtattcat tcatagcatc 60
 cacatggcgt ccaactttaa aatagtcaac tccgatcttc acacatttta aagcccaaga 120
 tgcggattgt ttctttactc gag 143

<210> 1287

<211> 741

<212> DNA

<213> Homo sapiens

<400> 1287

gaattcggcc aaagaggcct aaccttggga gctaagtagt tgctgcactt gaccactatg 60
 aagattgggt tgggaagggt ctttttggat gcacttgagc agggccccta atccctgggt 120
 cacaggcctg tattgggcca caggcgagga gatgggacca tctagttgca gaaaaacaag 180
 ctcaggactc ccactgattc tacattatgc ctcagctgag atgtctcacc tcaactctta 240
 tgatgcaacg agaagcccct tgggagcggt tcagtccac tctatactcc tgtcattgtg 300
 ctcatacag tctggcttcc caaaatcaaa ttcttggttc aaaaattgtc ttctctgac 360
 ctggcttttg gatgccacag aaggcccctg gagcaccag aagagaggta aacaggatta 420
 cctgacacag ttaggtacat gggattacca aaatgatctt taatattcct cagggtatat 480
 tttagggaat aatattaata tatgttccaa agttgtatgg gatttctaaa attctaattg 540
 ctgagtatat gctatcgatc acaattaagg ttgttaagtt attgtaaact atggagataa 600
 ccaaattgtat ttgtcagttg tgtttctgac tgaactacc ctggacattt tgttattcat 660
 agacaattgt tgtcttgttt tgatcctctt caaaggatgg tttataatca gctacagaac 720
 ttcaccaggc gccttctcga g 741

<210> 1288

<211> 171

<212> DNA

<213> Homo sapiens

<400> 1288

gaattcggcc aaagaggcct aggcctgggt atctgggctt ttagtttttc tatgctgtca 60
 catcctaatt ctgtcatgcc atccatgaac tctgttttgg agaactcgca ctgtgttgct 120
 gctctgaact tccatgcaat aatcaacaca ctaatgctgg ctgttctcga g 171

<210> 1289

<211> 132

<212> DNA

<213> Homo sapiens

<400> 1289

```

gaattcggcc aaagaggcct agtgcgggag tccatgaaaa tacatacact agcagccatt 60
gtaagggtcta tctcattatg tttgccaaac tttgaagtct gggcaagcat cccgtttctg 120
cgcccgtctg ag 132

```

<210> 1290

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1290

```

gaaattcggc caaagaggcc taatcacaag ggggtatatt aatttatttt tatttctcta 60
tctctctatt ccactgtacc aactaaaggc taggggttttt tttgtttttt ttttggtttt 120
ttacttatac ttgacaatag tagaacacct aggaaaatcc actgctacat gattgattta 180
gtaagagttc tcgag 195

```

<210> 1291

<211> 327

<212> DNA

<213> Homo sapiens

<400> 1291

```

gaattcggcc aaagaggcct agtaaaagtt tatctttttt tcctgatgat gtttagagtt 60
tggaaaagttc tctttttggt tggtttttaca ggtgggtatag ttaggggtcaa agaactggac 120
tggctgaagg acgacctctg cacagggtgtg tgtttctctc ggacgtccccc cagtatgatt 180
cagtgtattcc tttgtaatac ctcaagtgtcc ctggctctgt ggtcttgaca gagctgtagt 240
cccagctgct gccacagtcc catcggcgca tggcagcttc tctccattgg ccgatgagca 300
ccaactgtca ttctccgagg cctcgag 327

```

<210> 1292

<211> 598

<212> DNA

<213> Homo sapiens

<400> 1292

```

gaattcggcc aaagaggcct agaagataaa ctgaaaacttc tctgccttcc cgctgcaaga 60
gtgaatgagc gatccctctc aactgactca aaatgtttgc ctccccagg agatggagct 120
ctcgaaggcc ttctctggcc agcggacact cctatctgcc atcctcagca tgctatcact 180
cagcttctcc acaacatccc tgctcagcaa ctactgggtt gtgggcacac agaagggtgcc 240
caagcccctg tgcgagaaaag gtctggcagc caagtgcctt gacatgccag tgtccctgga 300
tggagatacc aacacatcca ccaggagggt ggtacaatac aactgggaga ctggggatga 360
ccggttctcc ttccggagct tccggagtgg catgtggcta tcctgtgagg aaactgtgga 420
agaaccagca ctgctccatc ccagtcctg gaaacaattt agagcccttc ggtccagtgg 480
tacagcggca gcaaaaaggg agagggtgcc aagtttcatt gaacttacac caccagccaa 540
gagagaaatc ctatgggttat ccctgggaac gcagatcacc tacatcggac gtctcgag 598

```

<210> 1293

<211> 256

<212> DNA

<213> Homo sapiens

<400> 1293

```

gaattcggcc aaagaggcct agaggcactt acaactttta acttcccttt gagtattgct 60
tttgcagtat cccataggtt ttgttatgtt gtttccactt acatttggtt caagaaattt 120
ttcagtttcc tttttaattt cttcatggac ccactgggtca ttcattgagca tattgtttta 180
tttccacgta tttgtattcc tcttgattatt aatttctagt tttattccat tgtgggtcaga 240
gaagatgcat ctcgag 256

```

<210> 1294

<211> 300

<212> DNA

<213> Homo sapiens

<400> 1294

```

gaattcggcc aaagaggcct agggcctccc aaagtgcctgg gattacaggc atgagccact 60
gtgcctggcc atttgccata acttttaatg agagggtagt tccagctaca gattgaggta 120
gtatgtgaat aaggatagaa agtggatata aaagtatttt tgttactttt taagaaagaa 180
ttatcagaag gctcaaattc tgataatttt agctaatagt attctaccta agaagtaaac 240
aaaggcccag aaattagatg atatgtccaa ggacatagta aatggggagc caggctcgag 300

```

<210> 1295

<211> 153

<212> DNA

<213> Homo sapiens

<400> 1295

```

gaattcggcc aaagaggcct agctagttgt tcaagtatat ttttaattata ctaatataat 60
ctcaacatat ttaacacaca catattttgg ttcatatttt atgtaagcat gattacctcc 120
tctgtggtca cttacagttc ccacacactc gag 153

```

<210> 1296

<211> 269

<212> DNA

<213> Homo sapiens

<400> 1296

```

gaattcggcc aaagaggcct acacgtttta atctgcagat ggacataagt ggattaattc 60
ctggtctagt gtctacattc atacttttgg ctattagtga tcactacgga cgaaaattcc 120
ctatgatttt gtcttcggtt ggtgctcttg caaccagcgt ttggctctgt ttgctttgct 180
atcttgcctt tccattccag cttttgattg catctacctt cattggtgca ttttgtggca 240
attataccac attttgggga gccctcgag 269

```

<210> 1297

<211> 577

<212> DNA

<213> Homo sapiens

<400> 1297

```

gaattcggcg ccgcgtcgac cttatctttt ggagcaaatt gacatgctgt tttttggtgg 60
ttctgctgtg tctgggataa cctcggctgt ttacagtgtg gcccgagcg tcttggtctg 120
cgccctgctc cagcgagtct gcttcagtgc agtgaaggaa ccgtggagca tgcaacacat 180
cccggcactg ttttcggcct tctgtggcct cttggtcgcc ctttcttacc atctgagccg 240
tcagagcagt gacccatctg tactcatgtc cttcatccaa tgcaggctgt ttcctaaatt 300
tttacatcaa aatctggcag agtcagctgc tgaccctctc cccaagaaga tgaaagattc 360
agtgcgggat gtcttaaaat gggatctcat cgtctgcgca gtggttgcgt tcctctcatt 420
tgcagtcagc gccagcactg tattcctgtc attgcgacca tttctcagca tcgtgctgtt 480
tgccctggct ggagccgtgg ggtttgtaac acattacgtg ctccctcagc tccgcaagca 540
tcacccctgg atgtggattt cacaccccat actcgag 577

```

<210> 1298

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (147)

<220>
 <221> unsure
 <222> (225)

<220>
 <221> unsure
 <222> (241)

<220>
 <221> unsure
 <222> (273)

<400> 1298
 gaattcggcc aaagaggcct aggaggggtgc agcttgacgc tgggcgggga catctcagca 60
 cagccccagg aggaggggca gatagctaca ggcccccca acccgctcta ggagagcagg 120
 aggggcacgc acaggtcggc tcttccttcc tccacccgag cactccagag agctggagct 180
 gggcatcccc ggttgggtgg tgacctggc tgtgtggcct gcacntgatg cagcatgtat 240
 ntcacacaga gctggccaag ctcttgcgat ctnttctaga gtgagtgaga tcagacggat 300
 gcttcaggc ctgcacacgg ggcagcatga gcagcacgtg accagcgtgg ccctcagccc 360
 tttgcaggct gctgcagtga ggcagggaac acactggact cctggcccaa gagctgggtc 420
 tgccactcga g 431

<210> 1299
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 1299
 gaattcggcc aaagaggcct agaagtggac caaagggtcta cctcatgctc attctgcctg 60
 tttggaagag ctttaagcgca gctatgagtt ctatcggtac tttgaaactc agcaccagtc 120
 agtaccgcag tgtttatcca aaactcaaca gaagtcaaga gaactgaata atgttcacac 180
 agcagtgcgt agcttgacgc tccatctgaa agcattactg aatgaggtaa taattcttga 240
 agatgaactt gaaaagcttg tttgtactaa agaaacacaa gaactagtgt cagaggctta 300
 tcccatccta gaacagaaat taaagttgat tcagccccc gttcaagcaa gcaacaattg 360
 ctgggaagaa agctcgag 378

<210> 1300
 <211> 367
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (356)

<400> 1300
 gaattcggcc aaagaggcct aagttaaggc ttgagaagct ctgaataatt caaaagtatt 60
 agaccacac agccttgagg agaccttcag aaactaagga ggagttttat attaaggagg 120
 acatttttagt cagtaagacg atataaccta cttactccgt aaggggaaat gaaggcccg 180
 agaagggaag ggacttgacc gaggtccac ttctgtttcg aggcagaagc cagactaatt 240
 ttcattgcctc ctgactccca atcagtttca caaagggtt caatctgttt atatacgtta 300
 cattcctgga tacgaggtct tttgatgttc agagtaactg actagttagt attagnagac 360
 cctcgag 367

<210> 1301
 <211> 1006
 <212> DNA
 <213> Homo sapiens

<400> 1301

```

gaattcggcc aaagaggcct aatgtcttcc tatgttccca tatttgagaa ggataggat 60
tctggagaaa atggagacaa ttttaacagg actccagctt catcatcaga aatggatgat 120
ggaccttctc gaagagatca tttcatgaaa agtggatttg cctctgggcg gaatttttga 180
aacagagatg ctggtgagtg taataagcga gataatacat ccacaatggg tggtttttga 240
gttggaaga gtttttgaaa cagaggtttt tcaaacagca ggtttgaaga tggatgtagc 300
tctggtttct ggagagagtc tagtaatgac tgcgaagata atccaacacg gaacagaggg 360
ttttccaaga gaggcgataa tgacttagac ccagacgaat gtatgcagcg cactgggtggc 420
cttttttggt ctagaagacc agtattaagt ggacacagga atggtgatac ttctcaaagc 480
agaagtggca gtggaagtga acgagggtgt tacaagggtt taaatgaaga agtaataaca 540
ggctctggaa agaattcttg gaagtcagaa gcagaaggag gagaaagtag tgatactcaa 600
ggacaaaaag tgacctacat acccctcct ccacctgagg atgaggactc catcttttga 660
cattatcaga caggcataaa ctctgacaaa tacgacacta ttcttggtga agtgtcttga 720
catgatgcac caccagcaat tctgactttt gaagaagcta atctctgtca gacactgaat 780
aacaacattg ctaaaagctg ttatactaag ctactctctg tgcaaaaata cagtattcct 840
atcatacttg caggacgaga tttgatggct tgcgctcaaa cagggtcttg gaagactgcg 900
gcttttctcc taccaatttt ggctcatatg atgcatgatg gaataactgc cagtcgtttt 960
aaagagttgc aggaaccaga gtgtattatt gtagcaccaa ctcgag 1006

```

<210> 1302

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1302

```

gaattcggcc aaagaggcct agggagaagg agaaccgcac cacgatggaa agggaaagag 60
ccctgcagga gctggaggaa gaaacagcca gacttgaaag gaagaataag acgttggtcc 120
acagtataac agaacttcaa caaaagctta caaggaaatc acaaaagata accaatttg 180
aacaagcag tccagatgga gccctagaag agacaaagg ttagttaca cagctggaag 240
cttcttatgc atgccaagag aaggagctgc tcaaggtaat gaaggagtat gcatttttga 300
cccagctctg tgaagatcaa gccctctaca taaagaagta ccaggaaacg ttgaagaaaa 360
tagaagaaga actagaggct ctgttccctg agagagaagt atcaaaactc gtgagcatga 420
accctgtgga aaaagagcat accagccaaa ataatagggg tactctacc caaaagacag 480
caagattatt cagtaaaaag attttttgct gtctcttttt catcacccca tttttcatca 540
gactgctgag ctacatgttt ttcatgtaa gattcataaa tccagctctc ctcgag 596

```

<210> 1303

<211> 117

<212> DNA

<213> Homo sapiens

<400> 1303

```

gaattcggcc aaagaggcct aaggaattat agaagagtta taaagttcta ttgaagacat 60
tgagtatagg caatgtctgt aaagaaagag aaagaggcac aaggcaaagt tctcgag 117

```

<210> 1304

<211> 123

<212> DNA

<213> Homo sapiens

<400> 1304

```

gaattcggcc aaagaggcct acgagtctgt tgtgccttct tcttcttctt gcttttttgg 60
ctgctccacc tcattggcag tgggctgcat tgcttcatta tgetcttctt ccaatatctc 120
gag 123

```

<210> 1305

<211> 140

<212> DNA

<213> Homo sapiens

<400> 1305

```

gaattcggcc aaagaggcct aactgggtccc caccaatctt ccagaagatt tttaggagac 60
gtagaatact gagaaaaataa ggtgagtagc attcaagaat taaggtaagg atcttcatga 120
aaacttgctg gatcctcgag                                     140

```

<210> 1306
 <211> 332
 <212> DNA
 <213> Homo sapiens

```

<400> 1306
gaattcgcgg ccgcgtcgac cagattgact gaaaagtcac atgaagagtt gattgtcttt 60
taatgggatg ttttaaacag ctgacatttt aaattttgat gaaatccagt ttattcggtt 120
gttcttttat gctttgggtg ttgcatccga gaaatctttt cccatccccc cttctcaacc 180
ccacctctcc tgtaaccccc ttcccttggt ccatgatgcc gggggccctt aacctctttt 240
ccatggaaat cactttacag ctgcatcggt cctcctactc cactgagtgt gggaggccca 300
aacggctgcc cactgacccc taccactcg ag                                     332

```

<210> 1307
 <211> 314
 <212> DNA
 <213> Homo sapiens

```

<400> 1307
gaattcgcgg ccgcgtcgac cgattgaatt ctagacctgc ctcgagacca tgggagggtt 60
tgtttgtaaa atcatagaac agatcctgaa gcagaataag acataccac tgctcttgct 120
cttacccttc cagaagagtt ggccatgact tgattatctc caagacaaca gtgactccta 180
gatgtgtctt cagccccctg cttttgtgac atcatttgca ttttttcaat tgcccaccag 240
aggtggccac tgggttttca ttttgggttg cgtataccta acctaattcc ttctctgatt 300
cccccaaact cgag                                     314

```

<210> 1308
 <211> 332
 <212> DNA
 <213> Homo sapiens

```

<400> 1308
gaattcgcgg ccgcgtcgac ggggcagatc ttcagaagaa cgaagtccag cacagtccca 60
ctggagccag ggagcactgg gactaacttc aaggcttctg attccttgat ataagagtgt 120
gagtcaatct tagactcttt taaagagaaa atggtcagta acctatcact acaaacaact 180
ggggatgcag ataagtattt gtgaaaaaca gaagttcttg agactgggtc aaatctcagc 240
tacttcaatt accatgggac aaatgtactc ttctgaaact tcggtttcct catctgtaaa 300
atggagatgt agcaccttag agggctctcg ag                                     332

```

<210> 1309
 <211> 232
 <212> DNA
 <213> Homo sapiens

```

<400> 1309
gaattcgcgg ccgcgtcgac tagcgagacc ctgtctcaaa aataaatata tgaataaatt 60
gaatttaact gtgcctaact atagtttacc atgccacccc tttggggtgt gcagtgcagc 120
aggcccagaa ccccttgctt tgcaaaatgc agctttttgt ggtccccaca cttgcctagt 180
aaccgccgtt ttgttttgtt ttgtgtttgc ttccagaact ccaagactcg ag                                     232

```

<210> 1310
 <211> 209
 <212> DNA
 <213> Homo sapiens

<400> 1310

```

gaattcgcg cgcgctcgac ctaaaccgtc gattgaattc tagacctgcc tcgagtaaaa 60
tggttgaaa cttggttctgt ctgtccctcag ccaggctggt ttttttaaat ttttatttta 120
ttttatttta ttgtatttta ttttatttta ttttatttta ttttatttta tttgagacgg 180
aatttcgttc tgttgcccag gccctcgag 209

```

<210> 1311

<211> 128

<212> DNA

<213> Homo sapiens

<400> 1311

```

gaattcgcg cgcgctcgac acggcttgat aagtatctca ggatattctg caggaatcag 60
ttctgtttct acaaagtcct gtattcccat tcagcatgat atggctgaat atgtgtgtgc 120
tgctcgag 128

```

<210> 1312

<211> 368

<212> DNA

<213> Homo sapiens

<400> 1312

```

gaattcgcg cgcgctcgac agcaaacata cagtgaacct ggcttttata ttgtctata 60
tagttaactt tattggaaat ctttattttt tcctccagat tagagtctag ttgttttta 120
tttcatcttt aaagacaccc tttagtgtt cctgtatagc aggccttagta gtaacaaact 180
cttcagcatt tgtttatctg ggattaactc catttctctt tcattttgaa ggactgtttt 240
accagctaga gaattctcag atgatagttt ttttctttca gcaattttata tatgtcatcc 300
atctgtcttc aggccttcaa ttgatttcta aggagatata agctcctaata attaatgagg 360
atctcgag 368

```

<210> 1313

<211> 181

<212> DNA

<213> Homo sapiens

<400> 1313

```

gaattcgcg cgcgctcgac ttgccttata gcttgtaagg cagaaaagca gaggtaaaag 60
aatactaatt tcgggaattc agccttttct accctggctc tgccagttct ggctgtgtga 120
ccctgggcaa gtttctttt caccctcggtt tcccactgt aatagtagtg tgtccctcga 180
g 181

```

<210> 1314

<211> 164

<212> DNA

<213> Homo sapiens

<400> 1314

```

gaattcgcg cgcgctcgac gacggcttgg agaaaggta gaattttttt ttttccttaa 60
ggtttgaaag tcttaacctt ttgggtggaa aagtttgggt taatcccacg cagagacttt 120
taaacatggt cacacattcg tatttaagaa aggcgggttct cgag 164

```

<210> 1315

<211> 125

<212> DNA

<213> Homo sapiens

<400> 1315

```

gaattcgcg cgcgctcgac gcttagattt atctattagg acttatcatg aaattgttag 60
aaacatccag agaagaaaat aggaatgaag agcattatgt tcctgtttta tcaactcaac 120
tcgag 125

```

<210> 1316
 <211> 167
 <212> DNA
 <213> Homo sapiens

<400> 1316
 gaattcgcgg ccgcgtcgac gttactggta agatgcaatt tcttctcctg gccatgggtg 60
 aaaggaggaa gaaggctatt gttctgttgc ttcatgggat atctgcttgg gtaatagttt 120
 tactgatttg gcttaggtct ctgagcaaaa agggaattgc actcgag 167

<210> 1317
 <211> 470
 <212> DNA
 <213> Homo sapiens

<400> 1317
 gaattcgcgg ccgcgtcgac ctccgggggc tttcttttat taagatttaa tttctgctac 60
 tttcttcaac aagctaagca aagccaggta tatataattt tcaagaacaa aagaataagc 120
 aggacaagga aatgaaacta ctgaccacc ttcaattttg ttccactatt taactgatga 180
 gttattgcac attgtaaaaa aaaaaaaaaa tgcctattac aataccacac taccctgtta 240
 cagatcacaa aataaggagg aaggtatttc cattttttta acaaaatata aaactgttac 300
 tcttaaacca gataaagagc aatacatgtg cgactaatat tcataaatta acactctgaa 360
 gctaactacc tgctattcaa aggaaaagca tttagaaaac actgaaaaac aggtaaatct 420
 ctacatcacc catatgggac agaaatgcaa agaactactac gttcctcgag 470

<210> 1318
 <211> 981
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (196)

<220>
 <221> unsure
 <222> (228)

<220>
 <221> unsure
 <222> (595)

<220>
 <221> unsure
 <222> (604)

<220>
 <221> unsure
 <222> (615)

<400> 1318
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 tgggtagaaa gcaaacacaa attccttctg tagaaagaca cctttatcct agccctgaaa 180
 taatactctc aaatantttt tctagggcag taagtaccag tcactaanaa taaccatgtg 240
 tgcaaagaaa caaattactc tgaacaagaa ttagtagaaa caacaatgaa gtgaaatata 300
 cctacaaaga ctttttatat tagaattata agacaactat acttattgtg tttaaagaca 360
 taaaaggctg aaaacctctg caggaaacta cacaagatt tgaaaaagtg tcaaaagaat 420
 ttctaaaatg gaaagatata atatagaaat ttaaaaactt agtggatggg tggtttaact 480
 aaaaaattgg ctagaatata ttatccagca tgtagcatag ggggttaaga gggttaaacac 540

ggaagaaaga ttatgaaaaa tggagaatgg agagaaaaga tctaacgtag ttttnactgg 600
 agtnatagag tgagnatagg gcaaacatag aacagagggtg atatttgaag aaataatgag 660
 tgataatatt ctagaactga ttaaaaacac tagcctgcag tttcaagaag cctaacaaat 720
 cccaagcagg ataaataaaaa tctctaattct agatacatca aagacaaact tcagaccaga 780
 gacaaagaga aaaatcataa agatagctag agaaacatta gaataccttc aaagatacaa 840
 tagtttagatt gacagttgac ttctcaacaa cagtgggaagc cagtagagtg ctatcttgaa 900
 tgtttgatgaa ggacaataac tgcctaccta ggattctaaa cccagtgaag atatatgtca 960
 gaatgagggc taaaactcga g 981

<210> 1319

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1319

gaattcgagg cgcgctcgac gtcgctggc taatatTTTT aatttcttgt agagacaggg 60
 tctcactatg ttaccaggc tgggtctcaa ctcccgact caagcaatcc tcctgccttg 120
 gcttcccaaa atgttggcgt tataggcatg agccactgca gcttggcaag ggaaaccttt 180
 tatctagaaa ctgccgtgct aagataagcc atataagtaa gaattttttt tgagaatata 240
 agaattatat ctaattactt gaatgtgctg aatttcagta acttttgggt ctgcacaatc 300
 tgtcaaagat aacagaatat attaggccca tagcacaaga gagaatatgc ttccaattat 360
 tttaatgaaa tgggtttttta atgagtgaat aaaatatcat aaattgtcag aaaaagtaac 420
 ctaatgaaat gaacaaatac ctgaactcct aaaaaggcca tcacgatgga gttgatgggt 480
 cccgggatgc cctcgag 497

<210> 1320

<211> 189

<212> DNA

<213> Homo sapiens

<400> 1320

gaattcgagg cgcgctcgac gagactgtgg ttgaatgaca gcgccttttc tgtttgata 60
 tataaagcct gattggactt ttgcagatcc tgggttttcta attatttttg ctctacctct 120
 ttgtggctta ccttgcttag ttttagaatc atcatgtaca gggattttac tttctctttt 180
 tttctcgag 189

<210> 1321

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1321

gaattcgagg cgcgctcgac tcgattgaat tctagacctg cctcgaggag agaactggga 60
 acgtaatctt tgagccgaag cttgcaggat caattatact ttatctgata gagaaagtgg 120
 gacaagtcat gtggagagct ggttcttttag gaaaattata attggtggca aatgtcaact 180
 gtgtctggag atagggtac tcgag 205

<210> 1322

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1322

gaattcgagg cgcgctcgac ctgtgcagtg agtgaagaca gagaaaagtt ccaagagaaa 60
 ctcttcttgg ctagagaact agaaaagatg atgaatggga gagggacaat ggggaggggt 120
 ggatatctgg taatttttct tctctctcag ctctgcctca aagcaagccc caatcctgag 180
 tctgcacacc tcgag 195

<210> 1323

<211> 475

<212> DNA

<213> Homo sapiens

<400> 1323

```

gaattcgcgg ccgcgtcgac tggggctctc aaacacatca aagcctgcta agtctccaat 60
tctccctgtg aagcaagaca cccctgtgtt cagtggcatt tggcaaggat cctgagggtca 120
cagcctgggt ttgtgatgtg gtgataatga ctctaagtag tgaacgcca agattttata 180
ttctgcctgc aaatcatgat gggttctaata gacacagcat ataaaagtcc tcaagtattg 240
ctttgccacc tccactgctc attaacttaa cttggtagga gtttcttgat ggaagacaat 300
caaacatttt tatgaatgag tcacaaatac tatcacactg attctttggc aaatataatt 360
cttattgttt tataagaaaa cagtcatcac ctgcaataga ctgatgtttg tgctctcctc 420
acccccaacc aaatttatat gttgaaatgt tgaaattcta acccctaggc tcgag 475

```

<210> 1324

<211> 167

<212> DNA

<213> Homo sapiens

<400> 1324

```

gaattcgcgg ccgcgtcgac aaaccgtcga ttgaattcct gctgattccg tctgaacttc 60
accaaggtga tccagctgct cttgcctctg gttcctggta acagttacat cgtattctaa 120
cttatcatat tctctccatg ctcggttcaa ttcggcagtg gctcgag 167

```

<210> 1325

<211> 786

<212> DNA

<213> Homo sapiens

<400> 1325

```

gaattcgcgg ccgcgtcgac cgctgagacg gtttggcggg gagtcctggg ccagggggag 60
ctgaaaggcc cgcaaccggg gaaacgtcaa aacaaacaga aggacttggg attccggagc 120
agtgcgcccc atcgctgctc ctgcagtgtc ggacgccacc gaccccgccg ccggaggact 180
gggcactgaa aggcctctag gcctaggcgc ggcccgcgga gccagacgtg ttgctgccgt 240
gagtaaaacg agcgccctct ccgcactcgt ttacaaatta aaatggagga aatttcgttg 300
gccaacctgg atactaacia gctagaggcc atcgctcagg agatttacgt agacctgata 360
gaggattctt gtttgggatt ctgctttgag gtgcaccggg cagtcaagtg tggctacttc 420
tacctggagt tcgcagagac tggtagcgtg aaggattttg gcattcagcc agtgggaagac 480
aaaggagcgt gccgcctccc gctttgctcc cttcccggag aacctgggaa tgggcctgat 540
cagcagctcc agcgctcacc tccggaattc cagtagctgc aaaatgagag tctgaaagtg 600
gccaggacaa taacatagac tggtcctgtg gcttcgagga gtaagctaag tagaaaaaag 660
tagaaaaatc agacaaaagt tttaattccc ccttgaagat cctagcattt aaaaacccaa 720
agtggataat ttaggaatcc tttttttaa gtgtattacc tggagcaagc tcagaagccc 780
ctcgag 786

```

<210> 1326

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1326

```

gaattcgcgg ccgcgtcgac ctatcctagg taatttcagg tactttctct tatgcaatta 60
attttattaa ctgatttctg gtctatctcc agagataaaa taccattcct tcacaactgt 120
attgtctgga agcccatga gatggtaatt ataggccttc tactagccag cagttctctc 180
tggatactgg catcagcagg tctccttttt cttgtgctgc ttggacaggt acctaccgct 240
ggcctcttca gtggccacaa tctcagctcc tcacctgctg gtttggagac tcatgagcac 300
cccaggcagc tcaagctgaa taaatagctg caactcgag 339

```

<210> 1327

<211> 299

<212> DNA

<213> Homo sapiens

<400> 1327

```
gaattcgcgg ccgcgtcgac aataaccaa atatagatat tgcaggctag agctgggcaa 60
ttattcaggg ggagggtgac tgttgtgctt gtttaaaacc aaagcaattc ccactgtccc 120
tgtgaaattt caaacctctc ccatataatt cagtgcacatt aatctgaatg gcatcttttt 180
ggcttaatca tattttgcct tgtttctttg ttaactgttt gagtttgtat gagtttgatg 240
ggctttctcc aacaaatgat cctttcccat ctgtgatttt ctctcctgta gacctcgag 299
```

<210> 1328

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1328

```
gaattcgcgg ccgcgtcgac aggtcccaa ttaattcata attagaatat ttcgtgtttt 60
tccagtataa cagttctata atctttgatt ataacctttg tgtaaattcc tataagtatt 120
gagtcaaagg agacacacat cttttcaggc attacatata aaataaatac taaactagac 180
tccaggaaag tggatcaat tcacattccc aatagcactg tcccaatggg gctaatttat 240
ctccttttta atctcagcgt atttccagtt ataacatacc atctttacct cgag 294
```

<210> 1329

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1329

```
gaattcgcgg ccgcgtcgac cactaccgta gttattttta agatgattgc agggagggtt 60
ctgctgttcc tggtcctggt ttctgtcttt tcgcaggggt cagttttggc ctctggggct 120
gttcttgagg ctccgggtgc agatcttgct gcggtcgctg ttcctggggt cgag 174
```

<210> 1330

<211> 476

<212> DNA

<213> Homo sapiens

<400> 1330

```
gaattcgcgg ccgcgtcgac ggggtgatgtg tgatcatgtc aatccaaaca gcagacacga 60
aagctcagag gaaataacgg cacccttggg ctctgatgta agactggctt tgggggaggc 120
cgtgcacgaa gaaaaggata ggaatatcac tcttctcctg aggggaacac ggacagacat 180
ggaagccaca tgaactgaag aaatccatca gagtaagagg aatgtcaggg gcaatacact 240
gaaaagggca ggtcaggcag agaattgtga aactttaatg ccaggctaag agggttcagc 300
ctctcctggg tttgatccag gaggcagaca gcaggacagc acctggtgat tttcaaacgg 360
gtaaaactcct agtgttcagg aaaactcaat tccaatccca agtacagtcg gtaattttta 420
agcacatgct ataaaggcat agtttcagca agtattcaat tcaccaaaca ctcgag 476
```

<210> 1331

<211> 749

<212> DNA

<213> Homo sapiens

<400> 1331

```
gaatgctgca gcttgatctt gggttgaaag aatagaatgc agagctatca ctttatatcg 60
ttcagaataa aatcttctat catttgatag aagatcatat aactgctgaa tatgagcaag 120
tcttggtaaa aagatcaata ctgctccttc aatatttctg aattggggac ttttatctaa 180
gtatgcaaga agttccaaaa tgagatccag gttgatttta tgaggattca tgtatagaat 240
agcatgctga gtgcggctgc tgtacttttg gtaaaatgga tttaaatcag catgtgctcc 300
agtctgaact gggatgtatt cctgatattt ttttattccc cctgctttgc ttgtaacatt 360
aatgggttact tcttcttctt cttccagaaa tttctgacaa tattctgagt ctttttccag 420
tacaaggcct gtttcttcta ttatatcttc aagatgaaaa acctcaacag gataacttct 480
```



```

tcttgaaatt ctgagaatgg ggcagtgtgt gaaatatgta gaaaattttt cgctgtccac 540
agtggcactc attagaatca agtgtagatc agaacgtttc tgtaaaattt ctttcaagat 600
aattagtagg aagtctgact ggacacttct ttcattgaacc tcatctacaa taacatgaga 660
cacattactt agaagaccat cttcttgaag tttccttagc aaaaccctg ttgtacaata 720
gagtaacctg gtagattcac aagctcgag                                     749

```

<210> 1332

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1332

```

gaattcgcg cgcgctcgac ttacaataga aaacactaat tacagtaatt aatgagagta 60
tggttaaata aatcatagta aatccttgta ttggaatact attcagcaaa ttaaagggct 120
atgtctacat aataaaatga tacagaaaaa tgtccaggat atcgtaatag aaaaaaatct 180
gcacacaaga gattttaagt caattttaaa caatattaag tctgatttta tttatgcaca 240
aaaataaaaag ccagagtggc atcaccaaaa tgggagaata gaaagctctg gattctcctt 300
cctccaacag gcagtgtgac aataaacatc cctgtacact ccccatgtgt atatacaca 360
atatttctct aagatagttc cctcgag                                     387

```

<210> 1333

<211> 698

<212> DNA

<213> Homo sapiens

<400> 1333

```

gaattcgcg cgcgctcgac gttattttca tcttatatct ttcagtacac taattctctc 60
ttcagatgtg tctaacctgc tatttaaaact cattcacttg agttaatttt acttactgat 120
tttctcagtt ctagaattta tatttggtta tttttagttt ccagttctct gccaaaaatc 180
tgtcttgtct tttatccctc tgaatgtggt aagtataatt atttcaaaag tctgtatctg 240
agaattccaa tatctagagg ctgtttgaac catcttttct ttttcttgat gttgtttgtg 300
tatctgtttc cagttgcttt tgattataag ccagacattg catttgcaaa ctagaacaaa 360
tttgtgacct tacatgatac cactttcttc caggaaggat ttacaattct gccagatgcc 420
taggggcaact agcaatttag gaacctcaa tctaatttta gggactgaca tgattcaaag 480
ctgatctgca gcctcagtga gagtatgtct actcctgggt aacccttgct cctatgggtg 540
agcccttcag ggtcttgact caaaatgagt tatgttcac aggtgtcccc tccttagggg 600
ccatgggcac taatctctgc cccattact cccactagcc tgtcaaaagg gctgcttagg 660
ttttagcagc ttctctgcaga actggctaat atctcgag                                     698

```

<210> 1334

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (20)

<220>

<221> unsure

<222> (53)

<400> 1334

```

gaattcgcg cgcgctcgan ctggtggatc atcttaggtc aggagtccga gancagcctg 60
gccaacatgg tgaaatccca tcactactaa aaatacaaaa aattagccag gtgtgggtgt 120
ggggcgctgt aatcccagct actcgggagg ttgaggcagg agaatcgctt gaacccaaga 180
gatggagggt gcagttagcc gagattgagc cactgcactc cagcccgggc aacagagcaa 240
gatttgaatg aaataagctt ctacagtctg ctcatgacat tattgggtct tgagaaataa 300
gagttcatct agttacgctg aacttccaaa ggtggacacc attacattgt atattaaaat 360
acacacacac acacacacac acacacacac acacacacac acaaatttgt taatatcacc 420

```

acagccctct caacttagga gctggagttc ctacatagct gtacactctg aaggcatcct 480
gcctgtgcca gtacctggac tgaggcacc cgttaaagaa ggctgtctgc tctgacagca 540
tgtggactac atctgtaagc tgcctcgag 569

<210> 1335

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1335

gaattcgcgg ccgcgtcgac gattgaattc tagacccttt cttccccac cttcaaact 60
tctccgcca cctgtcttcc catgggcat taatggcggc tccatttact caggccagaa 120
ccagaagagc cagcttcact ctctacccc ctctacacaa tctgactaga aatcctgttg 180
accctacctt caatctgtgt ctaggatgca acacctcaac atgtccacac ccccttcat 240
ccctcacctg aacacctagg tctccctgcc ctccctaccc tcccagtcgc tgggtttccg 300
tacagcagcc acagggatcc tgtcgtttct gtgctccaaa ctgcacagcg gctcctcagt 360
ttacttgaaa taaaacgcca aagtccttac aatggtctgca gagccggaca acccactggc 420
ctgcctagct gtctgacctg ctctccctt cctctgttag ctgcattggc ctctgcaccg 480
gctgtgtgtc atttgtaaaa cacccttcc aggcatttcc aggactgaac ccttcagctc 540
tttcaaatct ttcctcccaa gtcacctcga g 571

<210> 1336

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1336

gaattcgcgg ccgcgtcgac gatccatctg tcttccgcac aggacaaaca ggatgggttca 60
atggggatgt ggtgggaatc cccaatgtaa gagttaaaaga ggaaagaaac acaaaatgtg 120
gcttaacagt taaagacaga tttattgtag agaaaataaa cctgagaggg gcttctggcc 180
gatttcagtc aggagcactt tctcttacag actaagagta tataattggtt ttagggtgaa 240
ggggcttatt acaagcttgg aatgtttctt tgtgggggag aagttttacg gtggagttaa 300
aatgtctctg ggcagagggg aggttatctt ggggctgaca tctttccggc cagaagaggt 360
ttatctcgag 370

<210> 1337

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (27)

<220>

<221> unsure

<222> (320)

<400> 1337

gaattcgcgg ccgcgtcgac gacctanaaa gtgaaagtag acagatttgg gtagtgcatg 60
caggctaatt aatgatccca ggtgggctgg agtggttctg ttacattttc catgggtcca 120
gccctagagc agagaccatg ggcacagcc tgccttcc cattatgtgg ctcaagcacc 180
accacgtgcc aaagggcggg aacattagat ttccccaccg ctgtaacatc tgtaaatccc 240
acagtccata gaatcaaaat ggaagagaac ctacagtctt tgattgccag tcagaaggaa 300
tttatttttg aaacccaatn ctcgag 326

<210> 1338

<211> 617

<212> DNA

<213> Homo sapiens

```

<400> 1338
gaattcggcc aaagaggcct aaaaggcata gacaacaaaa gaaattttat tgagaggaaa 60
acacaagtcc ttaaaactgca aagatgtttg ccaggatgtc tgatctccat gttctgctgt 120
taatggctct ggtgggaaag acagcctgtg ggttctccct gatgtcttta ttggaaagcc 180
tggaaccaga ctggaccctt gaccagtatg attacagcta cgaggattat aatcaggaag 240
agaacaccag tagcacactt acccacgctg agaatcctga ctggtactac actgaggacc 300
aagctgatcc atgccagccc aacccctgtg aacacggtgg ggactgcctc gtccatggga 360
gcaccttcac atgcagctgc ctggctcctt tctctgggaa taagtgtcag aaagtgc aaa 420
atacgtgcaa ggacaacca tgtggccggg gccaatgtct cattaccag agtctccct 480
actaccgtg tgtctgtaaa cacccttaca caggtcccag ctgctcccaa gtggttctg 540
tatgcaggcc aaacccctgc cagaatgggg ctacctgctc ccggcataag cggagatcca 600
agttcacctg tctcgag                                     617

```

<210> 1339

<211> 792

<212> DNA

<213> Homo sapiens

```

<400> 1339
gagagtctca ctttgtcacc caggctgcag tacagtggcg cgatctcggc tcaactgcagc 60
cttaacttcc cgggctcaag cagtccctccc agccctaagt aaccactaat ctattttctg 120
tttctctctc ttaatttttt atattttatt tgtccctgaa gtttctgctg gttccccagc 180
tatgcttctc tccaccccag ggtcaactct ggggaggaga gattcaagga ggtacctgtc 240
tgctgcagaa cagtcccccg acctgaccca ggggagtcca tccagcagca gagcagacta 300
acgaggcctc tggggcctgc cattgccagc tactctgtcc acctggtttc tctcatcaca 360
tatggcacat tcacacattt gatggagacc attcaagggc ctgagctgct gtgaggctcat 420
agcctctgcc gtggcagcct ggctgcagct ctagaatagg atgaagcagc tgtcatgcgc 480
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ttgaatgagt gtctgagctt caggttcttt tatctgtaaa atggtgataa tcaactttac 600
ctttcatggt ggttgtcaaa attaaggtaa cagaagggaa aacacctggg gttcaataaa 660
tgtaacttg aagggtgttc tttgttttgt ttttctgtga ttatgggaat aaattctgat 720
tctcggattt ccaggtaaaag atggaggatt gaacacctac ttttgccttc tctgaaaacc 780
ccatttctcg ag                                     792

```

<210> 1340

<211> 588

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (44)

```

<400> 1340
gaattcgcgg ccgcgtcgac ttcagtttaa gaaatgtata gtcncaatct aggaaacatc 60
cctgtggagg ttcagggagg tgggtgggtc tgagggtctg ggtttctgag ggtccagagg 120
actgatggaa ctcagagcgt cctgagtgtg ggcagggtgt ttttaggctt tgggagtggg 180
taagtcttca ggagaggag tgggtgtgaga agaggagaga cggggatggc cgagattcag 240
cctgcaagag ctctgcttgg aagggaaaagg agccagcaga aaggactgga aagagtagtt 300
ggaggggagc gagaagaatc aaggctcatgt gccaccctgg aagccaaggg aagaccatcc 360
aggcatggtg gggacagctt ggtcagatgc cactgagcct caaggaagct ggagaccgag 420
gattagtgtc ggtgacatgg aggttttcag cctttcatgg gcaaggcagg agcaggtaag 480
gagggaaaag caactgagga gtagagaagt gtgtgatgac tcctggaaga agcctgggac 540
tgagggggga agacaggagt ggctgaggga gaagagggat aactcgag                                     588

```

<210> 1341

<211> 628

<212> DNA

<213> Homo sapiens

<400> 1341

```

gaaattcgcg gccgcgtcga ccgcggccgc gtcgacttga attctagacc tgcctcattt 60
tcctatgttg tgttaaggct ggctttgcat ggtgacgaag gacgcgtctc cctcctgtgt 120
gtaacaggcg gttctactgt aactgtatc aaagtttagc tgcagttagc tatttgcatt 180
aaattccagt tgcggtgcaa gtctttgcaa gcctgggtct cgtcattccc gacacacagc 240
cgtcaggctc gcagcccggg cagcgggtga gctcaccag caccagccag tgcggcttct 300
gccgctgcga ggagggcgcc gtggggaatg aggtcactat gtcaggagct cgtctctcagc 360
aggagcctct cctgcgctta caacacaact ccaatcgac cgagaagtgg gattcatggg 420
atttgggggg tggctgggtc ctcccctgtt tcttaaaaa gtctacggct aagatcagca 480
aggtgaaaaa gaatcacgta tctgcataaa aatgtccttt tcattgcact acgggtgcca 540
cgctcattgt gaaccccagg ctgaatcact cacgtgtaca cctgcggaca tgcatttaca 600
caccgacaca cacaccact aactcgag                                     628

```

<210> 1342

<211> 280

<212> DNA

<213> Rattus sp.

<400> 1342

```

gaattcggcc aaagaggcct accattaccg ccaagagccg ccgagagccc tagcggacgc 60
gcaactggag ctgaccggcc gcaccatgag actcctcccc cgcttctctc tgcttttctt 120
gctggccttc ccgcgcgcgc tctgtctacg aggcggcccc ggaggggtcat tagctgtggc 180
tcaagatctt acagaagatg aagaaaccgt agaagatcca ataatcgagg atgaggatga 240
tgaggctgaa gtagaagaag acgaacccaa cagactcgag                                     280

```

<210> 1343

<211> 569

<212> DNA

<213> Rattus sp.

<400> 1343

```

gaattcggcc aaagaggcct aagaccagcc tcgaatcgcc cagctcccca gcttcgtcga 60
ctcacagccc gcctgacccc ctctgacctc ttcccccaca tctcccaaca ctccaacttc 120
caacaacaat ggcaaaagctc ggattatgag ctggattggg ggtctttcta atatgctcaa 180
gcgtcatctt ggtcctcttc gccagctct ctcaagccac gggcggagca acggttctgc 240
ggcatcttca aatgtccacc attgacacta caggcctagg cagccagctg gcctcgtctg 300
gcgtcgatac ctgcctcttc tacggctcag gttcccgatc gggcgacaac acgggtctcc 360
gccagtacta cagctacggc ctctggaacg cctgcgaggg ccccaaccaag tcgggcacca 420
gcgacgtcta ctgccagggc gccaaagtgt gccgcaaatt cgaaccctac aacgccatcc 480
tcgctgatgc cccatcgagt gcccacacgc ccacgcgcaa ctgcgttggc aacaccaact 540
ttaccaagaa caaggcaggc accctcgag                                     569

```

<210> 1344

<211> 547

<212> DNA

<213> Rattus sp.

<400> 1344

```

gaattcggcc aaagaggcct agtcagtact tcaccccagg aacaaactcc tttgcattgg 60
gattcagatt gctcttcacc acaagatctt ccagagaaga gccatcactg ataacaaggt 120
cattaaactg gtcttggatt tgggtccatag tttgtgggag atctcgggct ggaataaacc 180
attcatgttc ttcttctctt tccagcattt cttggaaaca gcgttcaata aattcttctt 240
cccacaactc ctcttctatt tgtctgttga attcctcttc attttccatc cacatgtact 300
ctgcaaatgg attatcctct tcattgagaat gaccgttaat aatcacatcg tcattgatga 360
tgcttgggct agtactgctg cgacttggat ctttcatggg tgggtgttct tgcgtttttt 420
aaccagtgac acggcagcgg ggacggtagc caacgaatcc tgtcggcctc cgcggatctc 480
cacaggcagc gccgctcccc cgctcgacgt gcgctttgac cgcgcctctc cttctccctg 540
cctcgag                                     547

```

<210> 1345

<211> 389

<212> DNA

<213> Rattus sp.

<400> 1345

```

gaattcggcc aaagaggcct aggcgattgc ggggaccgtg ttgcccgcat tccccgtcgc 60
ttcctgcgcc cgaaaggcca gactgggtcg ggggaatccg gcctaggcgt ccgcgtcgcc 120
cggtgcgagc gggatggctg cggaagaaga ggacgaagtg gaatgggtgg tggagagcat 180
cgctgggttc ctgaggggcc cggattggtc tatacctatc ttagactttg tggagcagaa 240
atgcgaagtt ttgatgatg aagaagaaag caagttgacc tatacagaaa tccatcaaga 300
gtacaaagag ctggttgaag agctgttaga aagttacctc aaagaaattg gaattaatga 360
agatcagttt caagaagcac gcactcgag                                     389

```

<210> 1346

<211> 581

<212> DNA

<213> Rattus sp.

<400> 1346

```

gaattcggcc aaagaggcct acgaggggaa ccgttgggcc cgagcgaacc gtaccgagcg 60
cgggcatcgc agagcgcgag tgcggagctc ggagcgcagc acgatgggag gggagcagga 120
ggagggagcg ttcgacggca tgctgctggc catggcgagc cagcacgagg gcggcgtgca 180
ggagcttctg aacaccttct tcagcttcct tcgacgcaaa acagactttt tcattggagg 240
agaagagggg atggcagaga agctcatcac acagactttt aaccaccaca accagctggc 300
acagaaggcc aggagagaga agcagagctc gcaggagaca gagcgtcggg agaaggcaga 360
gcgggcagcc aggttgcca aggagggcaa ggcagagact cccggggcac agatcaagga 420
actgactgat gaggaggcag agagactgca gctggagatt gaccagaaaa aggatgcaga 480
gaaccatgag gtgcagctta agaacggcag tcttgactct ccagggaagc aggatgctga 540
ggaagaggaa gacgagggaag acgagaagga cgccgctcga g                                     581

```

<210> 1347

<211> 119

<212> DNA

<213> Rattus sp.

<400> 1347

```

ggatgaagct gctgccggac actgggcacc agaatcgccc acccgtggat gggggcagcc 60
agatgcccac agtgctggac acccgctgtg ccccgccagg gacctcccc caactcgag 119

```

<210> 1348

<211> 443

<212> DNA

<213> Rattus sp.

<400> 1348

```

gaattcggcc aaagaggcct acgcactgga cgctgaccgg ccgcaccatg agactcctcc 60
cccgcctgct gctgcttttc ctgctggcct tccccgccgc cgtgctgcta cgaggcggcc 120
ccggagggtc attagctgtg gctcaagatc ttacagaaga tgaagaaacc gtagaagatc 180
caataatcga ggatgaggat gatgaggctg aagtagaaga agacgaaccc acagacttgg 240
cagaagagaa agaagaagaa gaagatgtgt ctagtgaacc agaagcttca ccgagtgcag 300
acacaacatc tctatttgta aaaggagaag attttccagc aaacaacatt gtgaagttcc 360
tggttggttc tacaacaag gggacagaag attttattgt tgagtcacta gatgcctcct 420
tccgttatcc tcaggatctc gag                                     443

```

<210> 1349

<211> 395

<212> DNA

<213> Rattus sp.

<400> 1349

```

gaattcggcc aaagaggcct aggggtgcttg ctctcaaagt gctgcttgaa ggtcttgggg 60
tcaggcattt gtgtcctaca gactgtgcag gtatatatta aggcagcttt ggcagcagcc 120
tttttggtcat gtccctgtttt cttcttttgt ccagcctgct ttttggcatt tttctgctga 180
gactgaatct tctgctgtcc acgagccata tccgggcccgg gacggagtgg cgtccgagag 240
acggcgccagc gcgagaagag ctgagcagga cgagcaggga aggaaggggc gagccccgca 300
ccgcttgggg cctccgccac ccgcagagga aggaccgagc agagccggga gcacaacagc 360
ccgcgcctcg cacaccgcgc gcagcgcgcg cccgg 395

```

<210> 1350

<211> 161

<212> DNA

<213> Rattus sp.

<400> 1350

```

gaattcggcc aaagaggcct acgagacttc ccagagcaat tgataaagtg ttgtggggtt 60
ccttttttct gttgccaaaa gaaaactgct tttccactaa tttgttctt tcaagcattt 120
taaatatgac aatatttaac attaaatgtg tggtttggag g 161

```

<210> 1351

<211> 363

<212> DNA

<213> Rattus sp.

<400> 1351

```

gaattcggcc aaagaggcct agttttctac agccagggtc cccgccctcc tccttcccca 60
agccgtcccc agcaacacac agtcatacac atgggtagta ctgaagccct gacacacgcc 120
ccaaggaaag tgtacgacac acgggatgat gaccggacag caggcggtca tggagattgt 180
gacgacgaca aataccgccg ccggcctgct ctaggctggc tggcccagct gctcaggagc 240
cgggctgggt cccggaagcg gccactgact ctgctccagc gggcaggact gctgctcctg 300
ttggggctgc tgggcttctt ggcgctcctc gcccttatgt ctcgactcgg ccgtggactc 360
gag 363

```

<210> 1352

<211> 322

<212> DNA

<213> Rattus sp.

<400> 1352

```

gatgatcgcg accggagccc tcctgcgcgt cctcttgctc ctgctggctt tcggccacag 60
cacctatggg gctgagtgcg acccggcctg tgaccctcag catggattct gtgaggctga 120
caatgtctgc aggtgtgagc ctggctggga gggccccctg tgtgagaagt gcgtaacctc 180
ccctggctgt gttaatggac tctgtgaaga accatggcag tgtgtctgca aggaaggctg 240
ggacgggaaa ttctgcgaaa tagatattcg ggcttgcacc tctacccctc gcgccaacaa 300
tgggacttgc gtggacctcg ag 322

```

<210> 1353

<211> 357

<212> DNA

<213> Rattus sp.

<400> 1353

```

gaattcggcc aaagaggcct agccatgtcc tgttctccgc tcgtaccatt cttgtccctt 60
ttgcttctgc tgttccctacc cgaggttccc agagcagcca ctgcgtccct gccgcaagga 120
tcctccgagg gcgcagccac ctgcaaggcc cagcacctgt gcctcttcgg gccacgccgg 180
ttgtctctgc caccacctgt caatgtcagc ctctattatg agtccctgtg tggagcttgt 240
cgctacttcc tcgtccgaaa tttgttccca acctggctga tggttatgga aatcatgaac 300
atcactctgg tgccctacgg gaacgcacag gagagaaatg tcagcggcac actcgag 357

```

<210> 1354

<211> 336

<212> DNA

<213> Rattus sp.

<400> 1354

```

gtaattcttag gcttccgaca caaactaaaa aattctttag ccacttctt accgcaagga 60
acccccatct cactaattcc cataactaatc atcatcgaaa ctatcagcct atttattcaa 120
ccgatagcac tagcagtacg actaacagca aacattacag caggccatct attaatgcat 180
ctaactcggag gagctaccct agtacttata gacatcagcc cacttcttac cgcaaggaac 240
ccccatctca ctaattccca tactaatcat catcgaaact atcagcctat ttattcaacc 300
gatagcacta gcagtacgac taacagcaaa ctcgag 336

```

<210> 1355

<211> 488

<212> DNA

<213> Rattus sp.

<400> 1355

```

gaattcggcc aaagaggcct accatgtctg gtttgtctgg ccactatcc tggcctggcc 60
ctctcctatc cgccttgctc tttctgttcc ttctcggccc cagctcgggc ctcggcatct 120
ccttccatct acccgtgaac tctcgggaag gtctccgcga ggagatccac aaagacttgc 180
tgggttacggg cgcgtacgag atcaccgacc agtctggggg cgtctggcggc ctgcgcaccc 240
acctcaagat cacagattct gctggccata ttctgtatgc caaagaggat gcaactaaag 300
ggaaagtttgc ctttaccaca gaagactatg acatgtttga agtatgcttt gagagcaagg 360
gaacagggcgc gatacctgac caactcgtga ttctagacat gaagcatgga gtagaggcga 420
aaaattatga agagatcgca aaagttgaga aactcaaacc actggagggt gagctacggc 480
ggctcgag 488

```

<210> 1356

<211> 362

<212> DNA

<213> Rattus sp.

<400> 1356

```

gaaagaggcc tacgatgtcg ggcgcctccc gcggactgtt ctgggcccgc anctgcctcg 60
ccgcgctctg cctgtcggcc gcgcagagca acagcagcgc atctcccaac gtgactgacc 120
cgccgaccac gaccagcaaa gtggtcccga cgacgctcac caccaccaag ccgccagaaa 180
cctgtgagag cttcaacagc tgtgtttcct gtgtcaacgc cacttgact aataatatta 240
cctgcgtctg gctagattgc catgaagcaa ataagaccta ttgttcaagt gaattagtaa 300
gtaattgtac ccagaagacc agtactgact cctgttctgt aatacctacc accccactcg 360
ag 362

```

<210> 1357

<211> 372

<212> DNA

<213> Rattus sp.

<400> 1357

```

gaattcggcc aaagaggcct accttttccc gcgtcccga gcatgcagtt ctcccgtgtg 60
ctggcgcgcg tgtgcggtgt gctgctctgc gcctccggcc tcttcgctgc gtccggtgac 120
ttctgtgact ccagcctgtg cctgaatggt gggacctgct tgatgggcca agacaatgac 180
atctactgcc tctgccctga aggcttcaca ggccttgtgt gcaacgagac tgagaaagga 240
ccgtgttccc caaacccttg cttccacgat gccaaatgcc tgggtgactga ggacacacag 300
cgaggggaca tcttctactga gtacatctgc cagtgcctctg tgggctactc gggcatccac 360
tgtgaactcg ag 372

```

<210> 1358

<211> 131

<212> DNA

<213> Rattus sp.

<220>
<221> unsure
<222> (9)

<220>
<221> unsure
<222> (20)..(21)

<400> 1358
gaatggcgnc cgtgggtgagn ntggtcctgc tggtcctgct ggtcccattg gccctgctgg 60
tgcccgtgggt cctgctggac cccaaggccc ccgtgggtgac aagggtgaga caggcgaaca 120
aggatctcga g 131

<210> 1359
<211> 210
<212> DNA
<213> Homo sapiens

<400> 1359
gaattcggcc aaagaggcct aatgacaact ttatttgctt ccatgaaagc atcttggaag 60
ttgtataaac atttcttttt tgcagcattc tttttctctt tactatccga gactgcaggt 120
gtttcattgc tagatggagg tggaagggtc tccgggtctg tttctgagag tggtggccct 180
aatatttcac tcccttactg tgcgctcgag 210

<210> 1360
<211> 187
<212> DNA
<213> Homo sapiens

<400> 1360
gaattcggcc aaagaggcct aatagtgtgt tgcacatccc tgtcatctgt atcagacctg 60
tgctttctca atactctgta attttcattc cattgccatg tcagctctgc tatgtcagcc 120
ctcagtggat tattcagcag tctcttctct gcccccatat tccccccca ccacagccag 180
actcgag 187

<210> 1361
<211> 241
<212> DNA
<213> Homo sapiens

<400> 1361
gaattcggcc aaagaggcct agtatatttc tgtgattagt cctgaacatc ccatgttgta 60
ctgtttacct ctctcactgg acttagaaat tctgaagaac agaaacaaaa agttttctct 120
ttctctgtat gttctttttt tgttggtatt attattgact tggatatatc tctttcagat 180
gtattttctt ttattctcaa cacaaagtaa ttttaacatg atctttcttg gccatctcga 240
g 241

<210> 1362
<211> 210
<212> DNA
<213> Homo sapiens

<400> 1362
gaattcggcc aaagaggcct aggccaagaa aaaagaaatt ggcattctct agcaaagaga 60
ttagactttt aaataactct tataaaacag gttggcgatc atttcccaag attggtttcc 120
cttgagtttt tgctaaaaca aatcttagta gttttgcccg tttaaaacaa ctcacaatcg 180
taaatgctac tattcctaag atatctcgag 210

<210> 1363
<211> 343

<212> DNA

<213> Homo sapiens

<400> 1363

```

gaattcggcc aaagaggcct aagatattgt catgttcatt cagaattata ccagtcatt 60
ctccctgctt ttagcaacca atattttaat aatgtataat attttgtcca ctgaatgtgc 120
cactttacat aacaatactc ctgatgctgg actttcacat tggtatcaac ttttactgt 180
caataatggt gcaatacata tctttttgag agatagggtt ttaaattttc tttattttga 240
aataagttct aggttagagc ccaggtatgg gattagtgtg tggaaaatta agaatcctaa 300
tgactgaag actcctattg aaaccaagag caagatactc gag 343

```

<210> 1364

<211> 241

<212> DNA

<213> Homo sapiens

<400> 1364

```

gaattcggcc aaagaggcct aaagacacat ctgataaata gttgttcttt gtgtatgtat 60
gtgtacaagt atttgccagt agacagctgc catatttatt cataaatgca attaattgag 120
atttagtata taacctcaaa atcagtatat gactttacct gccaaagtgc taaagtgtgt 180
ttccgtctcg gaaatttaca tgtctgtttt ccttaacaca gttccaaagg atagcctcga 240
g 241

```

<210> 1365

<211> 268

<212> DNA

<213> Homo sapiens

<400> 1365

```

gaattcggcc aaagaggcct aagacctgcc tcactggggt ggccctgggag ggaatgaatc 60
agggtgctggg caggcccttc catggaaacc tatgggcact caggtgaatt ccgagagcat 120
cggttcagcat ggagagaatt cacaggcccg gcgaggatgg cagggatggc ccccttggt 180
gactttactt ccacggatgc tgccctgtca gggctcacc aatgctttaa aaatcaacgt 240
gccgattgaa ttctagacct gcctcgag 268

```

<210> 1366

<211> 482

<212> DNA

<213> Homo sapiens

<400> 1366

```

gaattcggcc aaagaggcct aaaaagactc cgtcgttcgg ccggacacct gaagtcaaga 60
cacaaaagag gacggctcgtt tcattgattt gggaagtggg cctacctgtg attagggagg 120
gggtacgtctc ccccaaaactg atcatcggtt ggggtgttaa cacagacgag gaaacacacg 180
tttttaaagt tcatgtacgt tcttgtagac agaggtaaag atttgaatc ctgtgccttg 240
tggtgtggac tttgaagctg gccccgccga cggccaccgc acagccccag ggtgtactt 300
gcaagtcgtt gtcacctggg aacattgtcc tttccccacg gctttaatca tgaaaaccag 360
gttgggggtt tttttttaat attgtgaaat gtacaccatg aaatgaaagg tttatcctgt 420
gccagaaacc aagggtttatc atgctcctag gaactttttt cttacaccgc ctaccgctcg 480
ag 482

```

<210> 1367

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1367

```

gaattcggcc aaagaggcct agagttacta agaacataaa ctgcaaaact gcctgcacct 60
caagaacaaa tactttatct aagtgtcttt attaaatact caatacaagt gtctgagcta 120
aaggaacctt agagatcact tactctaata cttttatcaa caaagaactt gaagtttggg 180

```

gagattatct aactcatcca aagtcacaga cttagggttc caagataata tgaaagtgtc 240
ttatctcgag 250

<210> 1368

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1368

gaattcggcc aaagaggcct atctaaatgt catttcaatc agaaaaccag ccatcaactg 60
tcaaaatggt aaaaacagtt atgtgtgttt tcaaagccag aagtgcatac atgtggtgag 120
acttcagggt ttactgttg tccacagttc tgagtccag gactggttcc cttactcggg 180
attctcccat ggaaaacttc atcggggaat tatagggtaa tattttcaag acttgaata 240
tgtctacagt tacctttcta aaaaacaaac aaaaaaatcc atttaaaagc atttttttaa 300
aaataatcat gccagggtag ccaaatagaa gcaactttgg ggtttttgca gagtcaagtc 360
ttataaattg tggaatatcc ccttggtcc aggagatcat ttgactcca cacacactcg 420
ag 422

<210> 1369

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1369

gaattcggcc aaagaggcct ataggcctct ttggccgagc ggagccggcg gaggcctctg 60
aatcaccggg gtcgctgttc ctgagcagct gcagagcagc gagggtgga gaggagcaca 120
tactgtccat ggagctggtg gtcaagggtg acagggggcg gtggtgatgg cgcagtttga 180
cactgaatac cagcgcctag aggcctccta tagtgattca cccccagggg aggaggacct 240
gttggtgcac gtcgccgagg ggagcaagtc accttggcac catattgaaa accttgacct 300
cttctctctc cgag 314

<210> 1370

<211> 256

<212> DNA

<213> Homo sapiens

<400> 1370

gaattcggcc aaagaggcct agctttatct cagcagacgt aactagccac agtaaagcaa 60
agcatactgt gaaacacaaa ataacgacct ttaggagtag gggcagaaaa atacatttat 120
aatgctattg ttttctttct ttttgatttt tcctatgtac agtcatttcc aatataatac 180
tatttttaat gcagagggtt taattcactt aaaaaatgaa aacatagtag ataagtgtga 240
gagcagaagg ctcgag 256

<210> 1371

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1371

gaattcggcc aaagaggcct accagttttg cctttcacgt ctatttgaca tagcaaccac 60
tctattgctg ggtaatttat gttctgttta aaacagaaat atttgtgcct gtagtctacc 120
attgctcaat ttgtaattta gctttgcaat gaaagcttct aacagttacg ccttgctctg 180
gtacattggt gtttcaggct tattagtttg cacatgtttt agtaatacaa ccaccgggct 240
cgag 244

<210> 1372

<211> 462

<212> DNA

<213> Homo sapiens

<400> 1372

```

gaattcggcc aaagaggcct aacctaaatc acctggaagg agagcattac tcacaaaaat 60
tgcaaaaacaa gggatatcaag aatttgtgta atagccagtg acatgctgta gatttttgca 120
aactggatgt acttagcatg ttttctaatt ctgactggct tttgttaact tgataattct 180
tcattctacct taaaaagaaa aaaattacac atagtcattc ttgatgttat aaatagagaa 240
aaagtgtgtg tgagcaataa tgcataagct actgataact tgcttacagc agatagcaat 300
aaggatattg gtggcattcg gcttgttttg taatagggat ttttttttg gttgaccact 360
ccccacact tccaaaatta aacagtgttt tcttagcatc ttgaatatct cctgcggtgt 420
atattaacat cttgatgaga cagatttcca ggcgttctcg ag 462

```

<210> 1373

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1373

```

gaattcggcc aaagaggcct atcacacaca ctggggcctg tctgggttg ggggctaggg 60
tagggatagc atcggaagag atacttaatg tggatgatgg gttgatgggt gcagcgaacc 120
accatggcac atgtataacct acgtagcaaaa cctgcatgtt ctgcacatgt atccgagaac 180
ttagaacata ataataataa ttttttaaaa agtcttgaa ccagggtgat ggaggtttga 240
aggttggcat atttatttac tggaaaagca gagtatgctc aaaattttga gatagttgta 300
ttgaaaataa actatcacag aaaacctatc tattaaaaaa aaaatagggt agtctccagg 360
atccatagct ccaagctcag gcaggaaaca gatataagga aagatttaa gtacaaagga 420
ctttgctcga g 431

```

<210> 1374

<211> 246

<212> DNA

<213> Homo sapiens

<400> 1374

```

gaattcggcc aaagaggcct aaaataaata aatacaagcc tggctgattt ttggggcatt 60
tcttacagaa ttggataaac aaagtgggtgc agagcccaaa actagaaagc cagaagactt 120
gggttaaate tctcacatct ctattcccca atagtgtagt aactgtggat aaatcctttt 180
ggagtgtctag gtctcctttc tcccacatct aaaatagtat ttattatgca actccgactc 240
ctcgag 246

```

<210> 1375

<211> 365

<212> DNA

<213> Homo sapiens

<400> 1375

```

gaattcggcc aaagaggcct acaggaagca ctgggctggg gaaatgggtt agaatggagg 60
gctggggcat cactaaaggc ctcttgcac ctggcagtaa ttcattgtaa ttttgtcaac 120
atggtcgtgt gccttttttc cagccctgat cagctgctca agagctggca gcagtaggta 180
gataattgga cttacaaaag tgaaaaattg gtatcaccag gatacttggg aggcattacc 240
tctatgtgat gtctttgtat tctgaaaatg ctagtgaac ctcttttatt taaatagaa 300
aggataagag aatctgagac tgagaaagag gaaaatggaa gtttgcgtat gaagcatagc 360
tcgag 365

```

<210> 1376

<211> 257

<212> DNA

<213> Homo sapiens

<400> 1376

```

gaattcggcc aaagaggcct aatccattcg acatcacggt gatgatccgg gagaagaacc 60
ccgatggctt cctgtcggca gcggagatgc cctttttcaa gctctacatg gtcattgtcc 120
cctgcttctt ggccgctggc atcttctggg tgtccatcct ctgcaggaa acgtacagcg 180

```

tcttcaagat ccactggctc atggcggcct tggccttcac caagagcacc tctctcctct 240
 tccacagcat cctcgag 257

<210> 1377
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 1377
 gaattcggcc aaagagccta agacgttctg tcatctgccca gcctgcatgg aacttcccca 60
 caccctaccc cagcagagcc cacttgaagt tcctgttctg agaattactc ttgtcaccaa 120
 aggcatttgt ctccagaagg ccactgtacc ccagcagggg agtgaggagct tggacaccct 180
 ctccatttga gtagtttctt ctttgggaat tgctgctttt ctgtctgaaa gccagagag 240
 ccaggtgtct gcggtgtgat ttcagctgtc aggggggataa ggggtgaagag aggagggacc 300
 atggccatct tgctgcccct ccccccacac ctcaaacacc cagccagggg ggtgaatgtc 360
 ccagagtgtt ggggtgaccaa aagctgtgtc caaaagccag catgcagggg cctgagcacc 420
 tgtggaagcc atgagctctg gcctctggat gctgagatct ggtggaagaa actgaactta 480
 caaccaggca aataacactt caaagctcga g 511

<210> 1378
 <211> 223
 <212> DNA
 <213> Homo sapiens

<400> 1378
 gaattcggcc aaagaggcct acaccaacat aacttcaaat tcaatttttag tttcacaatt 60
 ttcacattac tcaaaatatg aaattggaag cttaataggg aagtctgggt tgggggatgg 120
 agtagagaag tcaaagggat tatgtgatgg agatgagttt tatgccaaga taaggcttga 180
 tataggtgtt gaaaggtgac aatttgacca ttgattcctc gag 223

<210> 1379
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1379
 gaattcggcc aaagaggcct agctgctgga ggctctgcgc caggcagtg agcggaggcg 60
 gcagcgagg cccactgat ggccggggcc cctgccacc ctaactctca ttcattccct 120
 ggctgctgag ttgcagggtg gaactgtcat cagcagtgcc ttcagagcct cgggctcagg 180
 tggcactgtc ccagggtcca ggctgagggc tgggagctcc cttgcgcctc agcagtttgc 240
 agtggggtaa ggaggccaag ccattttgtg taatcaccca aaaccccccg gcctgtgcct 300
 gttttccctt ctgcgctacc ttgagtagtt ggagcacttg atacatcaca gactcatgcc 360
 aaactcgag 369

<210> 1380
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1380
 gaattcggcc aaagaggcct atgcagtggc tcacaccttt atctcagcct cccaaagtac 60
 tgggattaca gccaccatgc ccagactctt tagataatc taaattcttt agatacctgt 120
 tgttgcaaat acatacctag aagtgaatct tgaggaatct tcagatatgt gacatcaagg 180
 tttgtagct caatgtatct tgaaacctta atttaaccaa tatttcttga ggggccctta 240
 catgccaggc cctgttgctg gcctggagaa aagcagtgaa caaacagat gagaccatgt 300
 tatcatggaa ttttctggac aggacaaaca gacaataaac aaacatatgt gctcgag 357

<210> 1381
 <211> 349
 <212> DNA

<213> Homo sapiens

<400> 1381

```
gaattcggcc aaagaggcct aagcaaatcc agtttgctga tgacatgcag gagttcacca 60
aattccccac caaaactggc cgaagatctt tgtctcgctc gatctcacag tcttccactg 120
acagctacag tttagctgca tcttacacag atagctctga tgatgagggt tctccccgag 180
agaagcagca aaccaactcc aagggcagca gcaatttctg tgtgaagaac atcaagcagg 240
cagaatttgg acgccgggag attgagattg cagagcaaga catgtctgct ctgatttcac 300
tcaggaaacg tgctcagggg gagaagccct tggctggtgc aacctcgag 349
```

<210> 1382

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1382

```
gaattcggcc aaagaggcct acggagggtg cagtgcagca agatcaggcc actgcactcc 60
agcctggatg acgggatgag actctgtctc aaaaaaacga aacaaaaatt ttttaagaga 120
aatgtcattt gtttttgttt ttgagacagg gtctcactct gttgccctca ctggagtgcg 180
gtgggatcac ggctcactga agtctctacc taccggctca attgatcttc ccaccacagc 240
ctcccaaata gctgggagaa atgtcctggt tttaatgaat ttgtcttccct ttttgtcttg 300
tttgttttaa tatctagtga tctaataaat ttggatgata tcttttgact atcaattatg 360
aaacctgtat ctcgag 376
```

<210> 1383

<211> 192

<212> DNA

<213> Homo sapiens

<400> 1383

```
gaattcggcc aaagaggcct atcgattgaa ttctagaccg gcccgctccg tcaaaacaagt 60
ttcttcttag gctaagaaac gcagtatata cgagtatctc tatatatagt actaatggat 120
ttgatgtgct tcccccttag cgtccccctc cctctgtctc tcttcttca gccctggctc 180
cccctactcg ag 192
```

<210> 1384

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1384

```
gaattcggcc aaagaggcct aaaattgtca atatttaagt aactctttac tgagggcctc 60
ctctttgccg aattggggca ttcccatttc tgagtctcca agattccctg aatataactt 120
ctcttattgc ttatagcact ctgcattata gttactgatt tttttaaac aatgtccctt 180
attagatcat aagctcaatg aggctgggat gcatgtcttt ttttttattt gttcattttt 240
cagttttctc atgcctgttc taatcctcat gcatagtagc tgctcaatca tattagctga 300
gtgaatgaag agaggcgtga atgaatgaac aattgaatga attttcaaat gaaaaaagct 360
aaaaactaga taggtctctg acctttattt cctacacaca catttgtcaa ctacaacctg 420
atactcgag 429
```

<210> 1385

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1385

```
gaattcggcc aaagaggcct aagaagggtg aggttgagc gagctgagat tgcgccactg 60
cactccagcc tgggtgaaag agtgcaactc cgtctccaaa aaaaaaaca aacaagaaaa 120
aaccacaaca aactgttgct tgtaactaa caaatgagt atgaaacatg ttatatgttc 180
tgagttctct attaacatca acattgtgtt ccaaatgttg tgtttgccta ggaatggaca 240
```

```

ctcttcaaaag taaacttttc caaggacaca tcctcacccct ctgactgaag aaacctcaaa 300
aagcagagat tcctttaaat gtagtactat gtttgaccat taatacatat agcaataaaa 360
aatgtgttcc atttgtgcct ctgaaatagg ctgtttttcc ctgaaggaga gaataaattg 420
ggatgggtta ggcacaacca ctgttattat tttaaagagc caggagatgg aagtgtagtt 480
atgaaaaatg taccctcgag                                     500

```

<210> 1386

<211> 266

<212> DNA

<213> Homo sapiens

<400> 1386

```

gaattcggcc aaagaggcct agtgtggtta cgccggcgcc gggagggtgg cttgaaaggg 60
tctttatgaa ccttagggaa aggcgcgtctg gtaggaactc catttcaaga ccttttaaa 120
tgagacctgc atatgttgaa agagtttcag agagtgaagc tgggttctta gaagctggaa 180
tgccccagca gaatgtagaa atgcgaaaaa ttcggcacag tagtctaaac aggtgcaccc 240
accactagaa ttgaaacata ctcgag                                     266

```

<210> 1387

<211> 144

<212> DNA

<213> Homo sapiens

<400> 1387

```

gaattcggcc aaagaggcct aaatggaatc atgataaaat gtctattaca taatatactg 60
ttctgttctt tgctttttctc gtttaaaaaat atcactgtga aatgtcaatc caacatttta 120
tcacactata ggagccctct cgag                                     144

```

<210> 1388

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1388

```

gaattcggcc aaagaggcct accaagggtgc tgggattgct ggcgtagacc accgcgcccg 60
gccatgtttt ttgatattct gaataaaaag gatatagcag ttgggatagg cttgggttct 120
tgctcctttat gttcttgcct tttcctcatg ataatacaat cataattaga aataagatgc 180
taagaataca aagggtggctc tatgttaata ctgtattgat aggtcaaagg agaaggctcg 240
ag                                     242

```

<210> 1389

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1389

```

gaattcggcc aaagaggcct agtcattttaa tttttaatct actgagaaga aaaaaataag 60
acaattgaag atacgctttt ttatgggatt tgccgcttaa gcctaagtga taaaactgga 120
acgttttatt gtttacttat tagcaccctg cttattccaa aaatagaatt tgatatggtt 180
tctaaaaata catacaataa agtaaaaaat atatatatag agagagaaaag cgagctcgag 240

```

<210> 1390

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1390

```

gaattcggcc aaagaggcct aaaattgaaa ccaagaaaac ttgttttttag aatatttcgt 60
ctgaataagt acagtagcca aggaatacaa acataattgc atgtttttta aaattccttg 120
gaggctggaa ggggttaagc cagaagtgc atcaatagga attaggggaat gttgtatatt 180

```

tatatatgta aacttttttt gtaagaaaag ttggtgacaa ctaaaccaac tttttccaaa 240
 gtgcgctatg catattttta atgaaagatg acatgtattt gcacaaaaat tctcaggcac 300
 attaaattat tgtaaaactga agtaaaaccc aggtgtctcg ag 342

<210> 1391

<211> 365

<212> DNA

<213> Homo sapiens

<400> 1391

gaattcggcc aaagaggcct actcctagct ttactcttag agttgggaga gaggtttggt 60
 ttctattgtc atttaaatcc tgttgggttt cagcagagcc tgatcttttag ggccctgggt 120
 gcagctgttg tctggagatg cagatcactg tctgctgaaa agagccctcc tgctgggggt 180
 agggatctcc tgattgaggc atggatccaa gggcttcttt ctttgttctc tgattccctg 240
 aggtctctcc ttgtgtgtgt ggtgctgtgt cactcgtgtg agcgcaccag gaaactatgac 300
 agcaatcaac ggggtatgact ggggggtgggg agcagaggca gcatggccag gaatctatac 360
 tcgag 365

<210> 1392

<211> 167

<212> DNA

<213> Homo sapiens

<400> 1392

gaattcggcc aaagaggcct agctgacctt gatttcttgc tgatggagtg ttggacactc 60
 aaagggcacg tgaagccctg tgctgtggctc acctcattgt atccttgcaa cgtcctggaa 120
 aatgtgcaca acaatgtgac ttaattttca gacaggggtga actcgag 167

<210> 1393

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1393

gaattcggcc aaagaggcct acgaggggtg ggggtcccag atacctcaac caccacccac 60
 tgcaaggcgt cagaaggagg aggggaagtg gagctctgct ggggttggga gcagcagaca 120
 caggaggcac cagcccgtg tgaggggggg tgtgtggtgg gcagggaaga ggtgcagggg 180
 gttgaatttc ctgtggcttt cacttctctg ggctctgcct ctcccgttag ctcagagact 240
 cgag 244

<210> 1394

<211> 290

<212> DNA

<213> Homo sapiens

<400> 1394

gaattcggcc aaagaggcct atgaattcta gacctgcctc ttataagcca cattcctgct 60
 gttctcctgc actcttctga ttctgtatct ttacatctag attattttta cctcctaggt 120
 tctttccctc ttcatctacta ccttataaaa atacatccat tcttcaaata ttttcccaat 180
 ctcccagtaa gaattagcct ctctcaatgc tggtgcagtg gctcattcct gtaatcccag 240
 cactttggga agccgaggca ggcagattgc ttgaaccctg gagtctcgag 290

<210> 1395

<211> 286

<212> DNA

<213> Homo sapiens

<400> 1395

gaattcggcc aaagaggcct agagaagaga aaaagcaaac agaaattggg ggcgtttttg 60
 tggatgcaaa gaaatttaca ggaccccttc taccctagag gtccaaggga attcaggggt 120

ggctgcaggg cccacgaag ggacattgaa gacattcctt atgtgtagtg tccctggcag 180
gcatttacca ggccatgtgc ttaacgtta cggtaatact ttactttagg catccctcct 240
gttgcctagca gccttttgac ctatctgcaa tgcagtgaga ctcgag 286

<210> 1396

<211> 266

<212> DNA

<213> Homo sapiens

<400> 1396

gaattcggcc aaagaggcta caaatgagtt gtctggatgt ctcaacctta acatggccaa 60
cacagaattc ttatctctcc tatccaaacc tattgccatg cccaccaaac ttgaacccca 120
ttctttccct ctcggaat attaccacaa gctaccgggt tgctccagcc aaaaacctac 180
aagtcggact ttattcttct cttgtgtgt taccttgtgt tcagttcatc atccagtttt 240
gttgggttta cctccaaaat ctcgag 266

<210> 1397

<211> 568

<212> DNA

<213> Homo sapiens

<400> 1397

gaattcggcc aaagaggcct aattgaattc tagacctgct cttggctcta aatgtgggct 60
ttctctctcc agtcgccttt ttaactcatc ttctactgcc cagcccttca ggcatcagtg 120
cccctctcat gctctacaac ctttgcactt ggtgtccctt gtgcttggtt tcccctttcc 180
ctgcaaagcc acatggctga cctctccctt tcaggtttga ttggtcacct tctccgtgaa 240
gcctccctag ccattctgcc tctgattcca cccctctcac ctageccacct ttccattttt 300
ttttctctac cactcatcac ttgctaacta acataggcca aaggtggctt tttcttttgc 360
ttttaagatg caagatatct gatattgtta tgttgagaac taggagatga cagagaagga 420
aaagttgaaa acacaggcat gagaagagtt gatcgttttg caggtctctg aagaugaagg 480
tgaggagatga atcagagcat aagtgggaagg taaggccaag gaagaacacc tcctctctc 540
tcccctcccc tcccctcccc cgctcgag 568

<210> 1398

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1398

gaattcggcc aaagaggcct aagggggcag gacagtgtgg aatctctagg gtgtatgggt 60
aggtaggggg cacagttagt tctaagtggg cttttatgct aaaagcctct ggggatattc 120
gttttgaaaa taaagatagg tgtccctctc ttgctgtcat ctagcccaga cactctgctt 180
gctctctggc tgtctgctcc ctgggaaggc tttaggagga ccaccagga caggatgacc 240
atgctgccat ctgctctgga gctgggtctc agtgcagagg gacagtgact gtggatgggt 300
gcagtctctg gtgggagggt aggatagaag tgataaagag ctaagaggag cttctgggtc 360
tcctctcgag 370

<210> 1399

<211> 347

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (39)

<220>

<221> unsure

<222> (116)

220>

<221> unsure

<222> (127)

<400> 1399

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gaattcggcc aaagaggcct agcttcgagt cggggcacnt cgagatgctt tacttctttc 60
tttcgacctc ttaaaaaact aaaccaagcc aaaccacaaa ggaaatctgc acaacntaag 120
agagacntga aagggatcgt gtaactacta gtttgacta agtttttttc aagaaaggga 180
aacaatttta tatatatata tatatatata tatgtgcaat atatttttac actgtgtgat 240
taacattagg ggtcctggg caccatcgaga tgcctttactt ctttctttcg acctcttaaa 300
aaaactaaac caagccaaac cacaaggaa atctgcacaa actcgag 347

```

<210> 1400

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1400

```

gaattcggcc aaagaggcct agctccttct actatagtaa acatctctgc acataatcgt 60
ttctgtgtgc atgtggaact tctccattta caagggtgctt ttaagtcata aaacgttggc 120
tcttaccatg caggggtggg cgggtgtggc aggtggatgc ggggtgcttt cgccatccct 180
gggcctttct ccttccccct ttccttcaact cctccctccc tccctgactc aggatatcta 240
tctgattctc tctagcaatg gatcgtgggc aatggacacg caatatctcg ag 292

```

<210> 1401

<211> 213

<212> DNA

<213> Homo sapiens

<400> 1401

```

gaattcggcc aaagaggcct agtaaaattt tacaataatt atttggatta ttcagaagat 60
ctaatttaga tgagtaaatt caacttaagt ctgtgtgtaa aatgagtaga aaataggtct 120
tttaagaac ttaactcatt aattacgtgc taccattcct gagaggaac atgggggtcct 180
ggggaaatgg agtaggtgag gaagtagctc gag 213

```

<210> 1402

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1402

```

gaattcggcc aaagaggcct aggatgaagc tgctgctggg catgccttg ctggcctacg 60
tcgctctgtg ttggggcaac ttcgttaata tgagggtctat ccaggaaaat ggtgaactaa 120
aaattgaaag caagattgaa gagatgggtg aaccactaag agagaaaatc agagatttag 180
aaaaaagctt taccagaaa taccaccag taaagtttt atcagaaaag gatcagctcg 240
ag 242

```

<210> 1403

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1403

```

gaattcggcc aaagaggcct actaactagt gaaggaaagg tgaaactggt tccaaatact 60
aaaatccaga tgtcatattc agtaaaatgg aaaaagtcag atgtgaaatt tgaagatcga 120
tttgacaaat atcttgatcc gtcctttttt caacatcgga ttcattgggt ttcaattttc 180
aactccttca tgatgggtgat cttcttggtg ggcttagttt caatgatttt aatgagaaca 240
ttaagaaaag attatgctca ggtactcgag 270

```

<210> 1404

<211> 232
<212> DNA
<213> Homo sapiens

<400> 1404
gaattcggcc aaagaggcct atttaatagc aatctcaaaa ggcttctgaa atttcaatat 60
gaaattaatg ttaaccgata ttttactaca cacctacaaa cagatgctaa tggataaata 120
ttgtgtttca tttattttat tttattttat tagttttcca agacagagtc actctgttgc 180
ccaggctgga gtgcaatggc ttgatcttgg ctcaactgcaa cccccgctcg ag 232

<210> 1405
<211> 429
<212> DNA
<213> Homo sapiens

<400> 1405
gaattcggcc aaagaggcct aagagaacct acaaactaga cttgtagatt aaaattatct 60
gatcaaaaag gcagactgta aatttcctta agacctacct tggcataaag gctgacccag 120
caaaagaact gagaaatata gcctgagatg gacagcagta attgcaaagt tattgtctct 180
ctcctaagtc aaagataccg gaggatggc accaaggatg gccacagcac acttcaaatg 240
gatggcgctc aaagaggctc tgcatactct cgagatgctt ggggaatcct aatggacatg 300
cgctggcgctt ggatgatgtt ggtcttttct gcttcttttg ttgtccactg gcttgtcttt 360
gcagtgtctc ggtatgttct ggctgagatg aatggtgatc tggaaactaga tcatgatacc 420
ccactcgag 429

<210> 1406
<211> 235
<212> DNA
<213> Homo sapiens

<400> 1406
gaattcggcc aaagaggcct aaatgttttt tatttgctat ttaatgtttc tcttccttag 60
ccacagggga cactcatggg acaagtgcag accctcacag gcacccggag tcttgctca 120
caacttgatg catggggact gcattggcct cctgctgccc aggcctctga caggagtga 180
gggttcgagc agtactggg tggccaagaa ctcatctcat ggcggtgaac tcgag 235

<210> 1407
<211> 479
<212> DNA
<213> Homo sapiens

<400> 1407
gaattcggcc aaagaggcct actcgaagtc ctcaactcgt gatccaccgc ccttagcctc 60
acaaagtgtc gggattacag gtgtgagcca ctgcaccag tcacatgtcg tattttaaaa 120
gggatttaaa agtatcattg gattgtttgt aacacgaagg ataaatgctt gaggggatgg 180
atacccatc tccagcatgt catgattaca cattgcatgc ctgtatcaaa acacctcatg 240
taccataaa atatatacac ctactatgta ccacaaaaat taaaaataat ggtgggtgag 300
aagaaacact gcatacggtt tcaaaacat cagagaggcc atgggaaaaa ttttaaaaat 360
atattttacga agtgaacag ccattctaag tatgacacca aaccataaa cttgaaaaga 420
ccgatacatt ttactaaata aaaaataatg ttttgtatag caaaaccaat catctcgag 479

<210> 1408
<211> 234
<212> DNA
<213> Homo sapiens

<400> 1408
gaattcggcc aaagaggcct aataatctct gagaaattcc agactttccc taatcttttt 60
gtcttctgat ccttcaccag cactgccctt aatgctccag tcattgtcaat acagaccatg 120
ctcctagcca acctgtcctt ccaaattctt ccagcctctg cccattatcc agtttcaaag 180

ctgcttccgc attttcaggt gttcattttt agcaacaacc ccactcctct cgag 234

<210> 1409
<211> 209
<212> DNA
<213> Homo sapiens

<400> 1409
gaattcggcc aaagaggcct acgtcgattg aattctagac ctgccttcga gtttgacagt 60
ttaaagaatt taataagtta taattttata acctaaaaag aaatatgctc ttactttaca 120
ttaaataatta tacagtaata tttcctctcg tgattttttg tctcctagg ttatctagag 180
gtacaatatt gttaaacacc ccactcgag 209

<210> 1410
<211> 218
<212> DNA
<213> Homo sapiens

<400> 1410
gaattcggcc aagaggccta gtgcattgag gttgcaggta tacagtcacc aaagaacctg 60
aaataattgc cggaatgata tcctctaaaa gatgtgagcc tctcagagag agagagagag 120
ggttcctctt gcaacaggca tcgtgtgtgt gttttatgtc ccttctcttc tgctgctgtg 180
cacttaattc ggttccagcc gtgtcaggga gactcgag 218

<210> 1411
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1411
gaattcggcc aaagaggcct agagtaaaag cagtgggtgt ttatagaaac tgagtgattt 60
ttgtgaatca tataggagag aggacaggag atgagggtgga aaaggtagat ttggaccaag 120
tcttgaagga ctttagtgta atgctgcttt ttccttttagg aacagggtgtg gaggagtgtg 180
ataagatttt aagtaataga atcacatgct taaatccttg tttttagaat agcagtcatt 240
gtgataatgt ggaagacatt ggctttgtgc cttagaggcaa ggggacttgt agagtgtattc 300
agtaaagagg actatctcga g 321

<210> 1412
<211> 228
<212> DNA
<213> Homo sapiens

<400> 1412
gaattcggcc aaagaggcct agactggata gattcaattg acctatttct gagttctcta 60
attctttctt ctgcctgctc agatctgcta ttgagccagc cactctagtg aattttctcat 120
tcaattatta tacttttgaa atctagaatt tctgtttcgt cctttaaaac aaatctttat 180
attttctatt taatgaggat ttgttcttgt gctttccttt gtctcgag 228

<210> 1413
<211> 198
<212> DNA
<213> Homo sapiens

<400> 1413
gaattcggcc aaagaggcgt acgattgaat tctagacctg cctcgagctt cctgggtctc 60
cacatgctgt tcatcactct cctcctcttt acctggatgc ctcgtgcctg tgcctccga 120
cctccactga gacaatgtca cctccaggaa gtgccctca caatcctctc ctcccacaat 180
accctgtccc gactcgag 198

<210> 1414

<211> 241

<212> DNA

<213> Homo sapiens

<400> 1414

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gaattcggcc aaagaggcct atgagtagtt tggttcagtc tgtttaatac aagtacttat 60
tcctatgtat tttccaatac aaaggagcat aactgtata attttggctt taccagtacc 120
tgcttgccctg agtgccctgct ctttgagcct cttttacaca cttcccagtg gcctccatcc 180
tcacagacac tgctcaccag tgggcacttg caggaccagc acttacttcc cctctctcga 240
g                                                    241

```

<210> 1415

<211> 210

<212> DNA

<213> Homo sapiens

<400> 1415

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gaattcggcc aaagaggcct agacctgcct ctagtgtgtt gcttctgccg ttggtgtcac 60
atccaagaaa ccattgccta acacaagtca caaagatttt agagaatttt ttaaattgta 120
ttttattcat ttattcttaca ctttatagct cattctgctg tattttttaa aaggcagatc 180
cttcaaggac aatacatagg ggaactcgag                                210

```

<210> 1416

<211> 216

<212> DNA

<213> Homo sapiens

<400> 1416

```

gaattcggcc aaagaggcct actcaggata catcaatcac agtcagataa ttataatttt 60
agaatgtcag cttcatactt accagcactg tttattttta tattttttcc tgttatatgt 120
aatatacata acttcaaagc acatccgtac aaacctccta caagctgcac cttcataatg 180
agaaccata agcatacaat gtctacttcc ctcgag                                216

```

<210> 1417

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1417

```

gaattcggcc aaagaggcct aggagcaggg aacagggtgtt taaaattatc caactgccat 60
agagctaaat tcttttttgg aaaattgaac cgaacttcta ctgaatacaa gatgaaaatg 120
tggttgctgg tcagtcactt tgtgataata tctattacta cctgttttagc agagtattaca 180
tggtatagaa gatatggcca tggagtttct gaggaagaca aaggatttgg accaattttt 240
gaagagcagc caatcaatac catttatcca gaggaatcac tggaaggaaa agtcccacat 300
caactcgag                                                    309

```

<210> 1418

<211> 230

<212> DNA

<213> Homo sapiens

<400> 1418

```

gaattcggcc aaagaggcct atgacttttg gatatttggc gtgtattttt tctttaattt 60
tttccattgc tggccacact cactaaacta aattataact ctttgcttcc atattttcat 120
catattaaat gcttgcactc tttttttctt ccatttttac tatcccagtg tctgttttcc 180
cagaggaaca gttcatttca acagccaggg agaaagctgg gatgctcgag                                230

```

<210> 1419

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1419

```

gaattcggcc aaagaggcct acaggtggcc aacctggcca tctccccac caccacaggg 60
cccacctggc caggagacgc tctccggctc ctctgcctg gctggtgcca cctgaccgtt 120
gaagatgggc cccgggagat cctgatcaag gaagggggcc cctcgcttct gtgcaagtat 180
ttcctgcagc agtgggaact cacatcccc ggccacgaca cctcggtgct gcctgacagc 240
gtggagattg gcctgcagac ctgctgccac atcttctca acctcgtggt caccgcaccg 300
gggctgatca agcgtgacgc ctgcttcaca tctctaata acacctcat gacgtcgtc 360
gag
363

```

<210> 1420

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1420

```

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctagacctg cctcgagatg 60
ctgctgacct ccgcaagcct tactctctgg gagattgctg tagagaaggg tgtctttgct 120
gcagttccta tgagatctcc cagaaaccaa ggattggggg caccctccag tgacaaacag 180
aatccaacac ctctctccct ctctgctgct gtctctgct ccagcctctt ccttcccc 240
tctagcattg ctaccttctc tctacacgc acgcaggcat ataaacgtag gtttttgatg 300
ctctctgctc tgttgacccc gctattttca tgtttccaac aggtttttct tccccacccc 360
ctcgag
366

```

<210> 1421

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (52)

<220>

<221> unsure

<222> (193)

<400> 1421

```

gaattcggcc aaagaggcct acaaaccctt gggctctggcc aatgacactg ancactactt 60
tctgcgctat gctgtgtctg ccgcgaggagg tggctctgcac cgaataacct acccctgga 120
agaagctctt gccctgtagt tccaaggcag gccctctctg gctgctgaag gcagatcgct 180
tgttccacac canctaccac tcccaggcag tgcataatcc cctggtttgc agaaatgcac 240
gctgtactag catctcctgg gagctgaggc agaccctgtc agttgtattt gatgccttca 300
tcacggggca gggaaagaaa gactggtecc tcttcgggat gttctccga accctcacgg 360
agccctgccc cctggcttca gagagccgag tctatgtgga aatcaccacc tacaaccagg 420
actggctcga g
431

```

<210> 1422

<211> 252

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (35)

<220>

<221> unsure

<222> (39)

<220>
 <221> unsure
 <222> (74)

<220>
 <221> unsure
 <222> (105)

<400> 1422
 gaattcggcc aaagaggcct aggtcaacgt tgtcncatnc cttcacataa gggatagttt 60
 attttgggtt gcantcaaac ttgtgctcag actggtgaaa ctganagtca ggcttttaca 120
 ttttaagaa aatacagtat tcattctaatt tcagggtgtct acttatttta tgtaagaata 180
 attttagatt tccccccac catgaagttt cttcctatct tcttatgctg taacttacc 240
 cccatactcg ag 252

<210> 1423
 <211> 223
 <212> DNA
 <213> Homo sapiens

<400> 1423
 gaattcggcc aaagaggcct acccctgctt tctcctaaat tactctccca aaggtcacca 60
 aaggaccacg tggatcatcac atttgatgac cttctctcca tttttaccct ccttaacctc 120
 tctgtgtttg atattgtcaa ccactgtccc ttcatgagt ccctgtttcc atggcgatgg 180
 tgacattgta ctcttccagc tcttaaatcc tcttgaactc gag 223

<210> 1424
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 1424
 gaattcggcc aaagaggcct agggcagcga gatggaatca gcaagagaaa acatcgacct 60
 tcaacctgga agctccgacc ccaggagcca gcccataaac ctgaaccatt acgccaccaa 120
 gaagagcgtg gcggagagca tgctggacgt ggccctgttc atgtccaacg ccatgcggct 180
 gaaggcgggtg ctggagcagg gaccatcctc tctactactac accaccctgg tcaccctcat 240
 cagcctctct ctgctcctgc aggtggteat cgggtgctct ctcgtggtca ttgcacggct 300
 gaacctgaat gaggtagaaa agcagtggcg actcaaccag ctcaacaacg cagccaccat 360
 cttggtcttc ttcactgtgg tcatcaatgt tttcaccaca gacctcgag 409

<210> 1425
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 1425
 gaattcggcc aaagaggcct aacagcctgg aaactgcctc tagcagcagg ataatgcaat 60
 cacagggtc atttgtttcc cttttctcat ggatctgagt ttcacaagag tgaaactccg 120
 gctcaaaaaa aaggggggtt tattcgaaca acatacaaac acacaacaga atgcttcata 180
 agtcacttta aacaataaaa tagacaataa taacatacat atttttataa gcatactcga 240
 g 241

<210> 1426
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 1426
 gaattcggcc aaagaggcct agggacggag cggacccgag tgatacccg gagactagct 60
 tggccacagg agacaacgtt gaggtacaga caggtggcag agaaacaac atcggtattg 120

cttaaaccac ttgctatttc cagttccggc ttttgctagg tctaccataa ccaaataaccg 180
cagattgagt ggttcaaacg ccagagattg atattctcgc aagtactcga g 231

<210> 1427

<211> 298

<212> DNA

<213> Homo sapiens

<400> 1427

gaattcggcc aaagaggcct acctacgtgt ggccgcccag ctgtctgcag gctgtgccga 60
ccactgcctc tgtctccagg aagcagagggc agaagtgatc cttgctgagg agggccatcg 120
agtctccgct taaatgccag cacagagaga gcactgcaaa gtcgccttcc ccaggcacct 180
gcaccgacat gcagcccgct ggggaccaca ggtagagcct gctgcctccc gtgcagatgg 240
ccagccgcgg ctgctgcggg tcccactgaa acgcgcgcac tggggacagc tgctcgag 298

<210> 1428

<211> 161

<212> DNA

<213> Homo sapiens

<400> 1428

gaattcggcc aaagaggcct aattttaatc tacattatctt ttatatcttc aatttgaaac 60
aacctttaaa taatttcaaa gttagacaaa tgtttctaac tttcttcac aaaagcatat 120
tttgcctttg ttatacact gtttttttaa ttccactcga g 161

<210> 1429

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1429

gaattcggcc aaagaggcct acaggctacc atggtctaca agactctctt cgctctttgc 60
atcttaactg caggatggag ggtacagagt ctgcctacat cagctccttt gtctgtttct 120
cttccgacaa acattgtacc accgaccacc atctggacta gctctccaca aaacactgat 180
gcagacactg cctccccatc caacggcact cacaacaact cgggtgctccc agttacagca 240
tcagccccaa cactcgag 258

<210> 1430

<211> 288

<212> DNA

<213> Homo sapiens

<400> 1430

gaattcggcc aaagaggcct aatggtaaga atggtgcctg tcctgctgtc tctgctgctg 60
cttctgggtc ctgctgtccc ccaggagAAC caagatggtc gttactctct gacctatctc 120
tacactgggc tgtccaagca tgttgaagac gtccccgcgt ttcaggccct tggctcactc 180
aatgacctcc agttcttttag atacaacagt aaagacagga agtctcagcc catgggactc 240
tgagacacag tggaaggaat ggaggatttg gagtatcagt cactcgag 288

<210> 1431

<211> 231

<212> DNA

<213> Homo sapiens

<400> 1431

gaattcggcc aaagaggcct actgtgtgtg agtgcaggca ggctgacaat gatttctctc 60
gtgattacgt acagagcgag tccctgcggg ttagggggcc cctctggagc catcctgatg 120
gctttggggg ccttgcttcc attttccatt attatgtgga ctaccggagc gacagcgag 180
tccaagacct tgcaggtttg tgatgaggag ggagcacaca gcacactcga g 231

<210> 1432

<211> 221

<212> DNA

<213> Homo sapiens

<400> 1432

```

gaattcggcc aaagaggcct agctaggcag ggtgtctgcc ccctcctgag ttgaagtcac 60
gctccccctgt gccagcccag aggccgagag ctatggacag cattgccagt aacacaggcc 120
accctgtgtca gaaggagct ggctccagcc tggaaacctg tctgagggtg ggagagggtg 180
acttggggca cagggagagg ccgggacaca caatcctcga g 221

```

<210> 1433

<211> 332

<212> DNA

<213> Homo sapiens

<400> 1433

```

gaattcggcc aaagaggcct atgcgaaggc atggcgggga cactgtgaat gtcagcccag 60
aagggtgatca gagcctgtta attaaaatgg aaagaagaca gaagggaagg tagacatcag 120
gttctccctg gagacttttc gttttcattt acgctgcgga aactgacgtt tttgcctaac 180
accccatgta atgtaaaacgt ataggcttga gtacgtgtcc ggccgcatgt gtagtgaacc 240
ctaaagcttt cctaattgta gttagcatcg tccctaagcg gaacgatttt ccgtgaacat 300
gatttgtact tttctacgag ccattactcg ag 332

```

<210> 1434

<211> 212

<212> DNA

<213> Homo sapiens

<400> 1434

```

gaattcggcc aaagaggcct acttttacat acatggttgt atgtttatct gaactatttt 60
caccaatata ttcacctagt gtgtatggaa gtgtccattt ttgtcatacc cctggtaacc 120
ctgtgatatt atttttaaac attttgctaa tggatctctg ttcttgtttg aatgtattta 180
atttccagca gaatgagccc cattctctcg ag 212

```

<210> 1435

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1435

```

gaattcggcc aaagaggcct agagaaatgc aactgcctga aataacccaa actttcctcc 60
catccttgcc taccctgaga gagctttaac ctactgtggg cagccatgaa gtccttcccc 120
aactaaaacc atgcaacctt ccatcaagga aggtattctt taggtgtcct gcactttcag 180
ttttcttttc cttttttttt tttttttttt ttttaaggagg acgattctgt tctctatctc 240
tggtgttttt tcctgaaggt tttctgagtc agaataagaa gtcatcaga aaccattttg 300
atggaataaa ctagcatgcc ttcacacatt agctcattct ctagtccact tttttcaact 360
tcctgtagat agtaaagcaa tgaatatgca agctcgag 398

```

<210> 1436

<211> 398

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (88)

<400> 1436

```

gaattcggcc aaagaggcct agtagatccg aagtggcccg cgccatctca actatgaggg 60

```



```

gacacccgta ggcggcgga gagggacncc gcgaggagcc aataaagctc cgcaaccgga 120
agtgtcttct gggaggggtc gtacccgga gtgtggcacc tcccgggccc caccggaag 180
tgatgatgcca ccgccgctac ggggaagtaa tggatccgg ccaattgaga ttcggagtta 240
aaacagggat gtgcagatgg aggtcggagg agacactgct gccccggccc ccgggggccc 300
ggaggacttg gaggacacgc agttccccag tgaggaaagt agagaagggt gaggggttca 360
cgcggtccc ccgatccc aagacaagga cgctcgag 398

```

<210> 1437

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1437

```

gaattcggcc aaagaggcct acttccaatt aactagtgtt gacaacattc aaaaagagt 60
aataaacttc gccttaattt taataatcaa caccctccta gccttactac taataattat 120
tacattttga ctaccacaac tcaacggcta catagaaaaa tccacccctt acgagtgcgg 180
cttcgaccct atatcccccg ccgcgctccc tttctccata aaattcttct tagtagctat 240
taccttctta ttatttgatc tagaaattgc cctcctttta cccctaccat gagccccctc 300
accaccaccc tgccaccgc atgcctcatc ctggcatcaa cgagcaccgc ccttgggctg 360
gacccagca ccctgacttc ggccctcccc cccatggctt caacgggcag ccccccacaca 420
ctcgag 426

```

<210> 1438

<211> 509

<212> DNA

<213> Homo sapiens

<400> 1438

```

gaattcggcc aaagaggcct agagctgcgg ggaaggaggg ctgggaggcg ctgaagcgag 60
ggcagatctg agtgtctgta ggagttgcta ttccaaaaaa aatcattact ctctaattgt 120
tctgatttta gatcagcaaa gcgtgccggg cgggtggtgga gagactgagg gcggacaagg 180
cgagagggaa cgagccgtcc acccttcgga gaagcctagg cgcttgtaa gtaattcgcg 240
aacagtcggg agaacaaca gccaaagcggc gctgcagtgg ccgcacttgc gcgcgtctca 300
atcctggggg ctctgcgcgc ccgccccagt cctcgcgcc attgactcag tggcttctcc 360
gggcgctgca gcctccgccc ggggcttcga agggccgagg ggctccggca gagagggagt 420
ggagagggag acgcgccggg accgacgaac aatcctgccc ctgcggcaaa ggtctctacc 480
cggcgctggc acctcgacag cccctcgag 509

```

<210> 1439

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (270)

<220>

<221> unsure

<222> (280)

<220>

<221> unsure

<222> (289)

<220>

<221> unsure

<222> (304)

<220>

<221> unsure
<222> (349)

<220>
<221> unsure
<222> (352)

<400> 1439
gaattcggcc aaagaggcct agggaccggc tttaaaatta agtgggagca ttgcattacc 60
acccctttct ctttatgcc acgggcatgg gaaaggaggc tgcatttggt gtaaaaaacg 120
agggtctttg tacaatgggt gcacgttact tcatgacgca cgtccgtct gtcgtagtgc 180
tgggtcagac tcttttcaag tgcaaaggag tccccacact ccaagcactt gtaccacgc 240
gtcggtaacg tgatccctgc attggcgggn ggactgaggn ttgggatgna aacagggact 300
ggantgacac tgctcagcac cttgttgaaa gcttccacca cagaactcng cnaggacgac 360
accacctgga ctcgag 376

<210> 1440
<211> 449
<212> DNA
<213> Homo sapiens

<400> 1440
gaattcggcc aaagaggcct aagggtgtag acccgatcaa tgtgggaaat gtggaagaca 60
ggctcatcgc tgggaagggtc tgtgggcagt ttcaccaaga cttcattcag gaaaaatggc 120
gttttataca ttttgaattg agcattggac ttcgagctga aaagtcttc agagccagag 180
gaaacagcaa actgcttgac catgtaggta agaagcagga agtcattgaa gaggaatccg 240
tgcagtctct tgttgcctt ggtcttgat aatttccac tgtgtaagag cttccggggc 300
cccaggcagt tggtagaga gttgaaaata agttgctccg cgaggccttc aactgcacg 360
tgcgctgga tccactccag tcggtccgag ttttcttct cccgaactcc ctcattcact 420
tgagagcaca gctcctctgc ccgctcgag 449

<210> 1441
<211> 316
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (298)

<220>
<221> unsure
<222> (308)

<400> 1441
gaattcggcc aaagaggcct acaatcttat tcatatatta gcaagaaaaa gggagagatg 60
cttactgggt gatgctatag agtctctgt ttttaaaagt accactgcgc ccagcccagt 120
attctgattt taaccaactg gttctgatta tatttacc aaactggagt aacttctctt 180
tccttatact cttctctccc tatccctac tcacaccgag gcttaacagc aacctcagat 240
ctcatccaat ggacagaaac aaatgttaag caacttgtca tctcactcat gatttacnta 300
tgctaantgt ctcgag 316

<210> 1442
<211> 251
<212> DNA
<213> Homo sapiens

<400> 1442
gaattcggcc aaagaggcct acacaactca gttttgtctt ctgtattgtg tatttgagtc 60
ttctgtattc tgtatatact ttatggtgaa cactttgtgt ttgaatattt gtgtgccaaa 120

```
tgaagcctgt tttgtctaaa ttctatctt gcaagggtgca gtcattcttc tctttctctc 180
tgttttcttc tttctttctg tctctctcag cctctctctc tctcagtgc tgcggcaggg 240
gctcactcga g 251
```

<210> 1443
 <211> 265
 <212> DNA
 <213> Homo sapiens

```
<400> 1443
gaattcggcc aaagaggcct agcccttgac cacataccaa atagagggtca gcttcttagc 60
agggcattca aggccactgt agctcctacc tacttttcta gtcattcttc tttccaccct 120
ccacatggcc agcctctaca ccgtcacgat gaatgactgg ccctcatccc tgaaggctgc 180
agtgtcaatg cttctgtctc cttctctttt cttttcttca agctgctctt ctgctgttac 240
ctccaggaaa cccccaaggc tcgag 265
```

<210> 1444
 <211> 417
 <212> DNA
 <213> Homo sapiens

```
<400> 1444
gaattcggcc aaagaggcct atttgacaat ctttggcatt ccttgttagat gcattcacttt 60
aatctctgcc tctgtcttca cacagcattc tcctccatgt gtctctgtct ctgtccaaat 120
tttctctctc taaggacacc agtcatattg gacttaggtt tcaccccaat ccagtatgat 180
ctcattttta cttgattaca tctgcaaaga ccctgtttcc aagtaaggtc acattcacag 240
attctaggtg gacatgaatt tgggtgagggg agggggtagg ggactggata ctgtgcaaca 300
ctatgtacca ggcactgtgc taagtacttt gcatacattg tctcatttaa ccttcacaat 360
actccctga gattccttta ttattattat tcccatttca cagatgaaac gctcgag 417
```

<210> 1445
 <211> 222
 <212> DNA
 <213> Homo sapiens

```
<400> 1445
gaattcggcc aaagaggcct aaacccttct gttgggcgtt tctgctgaga ggcgaggaggc 60
gctgagagtc tgtgcggagg tccgtggaca gactgctttg ctctgtgttg ctcttcggag 120
gcggcgatcc ccgaaggcga gctgaaatac ggctgcaggc tacaatttgc agccgacgat 180
tatggaagac ggcaagcggg agagggtggc caccactcag ag 222
```

<210> 1446
 <211> 221
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (52)

<220>
 <221> unsure
 <222> (70)

<220>
 <221> unsure
 <222> (97)

<220>
 <221> unsure

<222> (209)

<400> 1446

```

gaattcggcc aaagaggccta gatgtttgta acacaagggg tcattttctt cnatactttg 60
gggttctctn gtccattctt attttcagaa gaatttngat catttaggca tgtgtgcaaa 120
gaatgatgtt ggtgaggctc agattcaatt gaaacagcaa tcagttagcc actagtggca 180
ccaagcacat ttgattcgct ttcagaggng ggaagctcga g                               221

```

<210> 1447

<211> 204

<212> DNA

<213> Homo sapiens

<400> 1447

```

gaattcggcc aaagaggcct acaggaaggc agaatgcacc catcactact tagagtcttt 60
cttgcccttg gcactttctc cacaaatacc aaaacgtata catcaagtgt gagcagggtca 120
gcctgctctc tgccatctct gttagtttta ttttcatcca caaattttaa gataaaccat 180
caaattggaa atcaccaact cgag                               204

```

<210> 1448

<211> 253

<212> DNA

<213> Homo sapiens

<400> 1448

```

gaattcggcc aaagaggcct agaaggacat cacaatgctg ttagacaccc agtgcattctt 60
tgccctgata agaatttga actacaataa atctcggata cattccttcc gaggcgtgaa 120
ggacatcaca atgctgttag acaccagtg catctttgaa ggagaaatcg ccaaggcctc 180
tggaaccctg gcgggagccc cagagcactt tggagacacg atcttattca caaccgatga 240
tgacattctc gag                               253

```

<210> 1449

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1449

```

gaattcggcc aaagaggcct agcctccatg tgagaggatg gcagactcag tgtagggtat 60
cagagcatga atgggataag gaggatgacc atttgggaga gtagaaagag tggcagctat 120
aaccattgca agtgtgttgg agcctaagtg gaatgatgag ggcattcctgt gcaggagggc 180
agccagcctc aggatagtag aaccagggtg gagagggggg cagtccatgc agacagcagc 240
acagtggcat cagcttgatg gagagtgtta gagtggggg cagcagtggc agtctaataa 300
gggtatgaag cttgagtaca gtaaagaggg tacctgtatg tagccatggt ggcaatgaga 360
gactgattac tacctgctgg agattgtttt aagtgtgtta atatattaag gagaaactcg 420
ag                               422

```

<210> 1450

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1450

```

gaattcgcgg ccgcgtcgac agacagtctc taggatgtga gaaagagaga gaagggcgaa 60
aaggaaagt ttggctgaggg agaagagaga aatgtggcag gggtagggg aacctgggtg 120
caggccaggc tgcctcagcg ataccaggg gaggttagtg tgggaaggaa ggaccaggaa 180
tccctgaaag gaccaggagg caacgggacc tgaggggggtg ttggggaggc aaggaggggc 240
tgctcggact ggagctgctt gccaaagtat tcccagttgt gcaccatgag cttctgcacg 300
gccagcagag cattatagcg gacctgctgg tcttcattat gcatgtggtt catgaccagc 360
tgetttccac cgagctgctc gatgaccctg ttgcctcgtg gataatgccg cacatatctt 420
ccaacatctc gag                               433

```

<210> 1451
<211> 609
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (571)

<400> 1451
gaattcgggc aaagaggcct acacatgtgg gctcgttctg tcaactcaagg ccagcagaag 60
gggaaccaga agtgtcagcc aattttccag aagagaaaca gagactccca gaggctgagg 120
gcctggagggt ggtgcagcac agtcccacat ctgatggggc tcctttatct ctgaaaggcc 180
atcttgcttta gtctttgagt tgacagaaag aggcattggac ttgtctatcc caattgatgc 240
tccagcctca aaagctgtgc attcactata gctagccact gactgtccac accttctctg 300
aaacttcaac tctaatagct ggaaaagaac actctttctt ctcaactctca catgggttaga 360
gagagagaga gagagagagg tggatgaaca tactttacag atgtgttcac atttgctaag 420
tggtcccca gccatttctg gaaagaatga ggttgcaatt gcctagtggc tgctcagggg 480
gagagagctg gcaaggggct gacagcagac accctggcat cccagtggc gtctgctgtg 540
cctggaaactg tagtcccca atatggtcaa nttgcgcgtg aaagtatttt aagagctgta 600
atcctcgag 609

<210> 1452
<211> 806
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (364)

<400> 1452
gaattcgcgg ccgcgtcgac aatataaaat tcccattaaa atgggtgcaa taatagagga 60
acaagaagta aggttactct ccttgcatag taccttccct ctcaaggacta atttttagcaa 120
aattgagatg taaaatcata tcttttttca gttatttaag caacattaat gatctattaa 180
atgaaataat ttgtctgaaa atatctagta taatgcctgg ttgatagtag gtactgaata 240
tttgcatttg ataattttat tttctcattt cctacctact ttctctcctt tcctttaatg 300
tttaaggctg tgttagcatt gtttagcctt tacattcttc agaatttgaa tttttaatcc 360
tgtngggctt taatttcttg ggatgtgttt tattttgagg agagtagtgc aagggtgaga 420
ggttatcatt ttagcgtgct gggttaaccag ggggaccca gtgtgacctg agttcttggt 480
gtgtctgctg gtataattta tgttatggca ggcagtgggg tgggaggtag gtaggtggta 540
gatatatgaa aagtagaata ttaacctctt agtacatttg aagcatgtac tgcctaattc 600
aaagtgaatc tttctgtatc atgtgcctcc tgagggcagt tacgtgtctg ggataagtag 660
agcgtttttc attctactct caagcacact aaaatgctta ttatgtgaag tattaaggaa 720
taataagggtg attttcaacc ttgttataca aaacaaaaat ttgcttttct ttccaatctt 780
ggatgattga cagggtattgg ctcgag 806

<210> 1453
<211> 576
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (69)

<220>
<221> unsure
<222> (530)

<220>

<221> unsure

<222> (554)

<400> 1453

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gaattcgcgg ccgcgtcgac gaggatagtt gtgaaataaa tagctcactc cagggagtgga 60
gaagatacnt cccccattca aggtacactg ccaaactgca ggaaagagat cctagcacc 120
accaaggtgc aactatgcta ctggatctct ggggtggaaag aaacaaggag ggagttacag 180
aggaataatg ttagcagcag aacagagatt ttcattccaa cattatttat gatgaatttg 240
gggaaaaatca gatgaaaaat atatggccaa agtgaatcaa agaagacact aaaattctta 300
tattttttatc ataatagaca gtgctgcact gcacaaaact ttgtcttcat tctataactc 360
ttttccaagt ctagaaaaga gtctagaaaa actagactca tatcaacaag cttactctat 420
tcatgcttac agcgaaaatg agggcctcaa attaggaggt ctttcctttt aagccattct 480
tctagaagaa tgcagtctag aagttgtgag ctgagctttg gccccctaan atcttcaga 540
aatgaacca cctnatacca caatcaaacc ctcgag 576

```

<210> 1454

<211> 145

<212> DNA

<213> Homo sapiens

<400> 1454

```

gaattcgcgg ccgcgtcgac cgagtgtttg gtgtaacctg tagcagcaca tgactcactt 60
gctttctccc attctggccc accaccatt aatactgcag gtgaagacag atttgctctt 120
cctcctatta ctctcctgac tcgag 145

```

<210> 1455

<211> 439

<212> DNA

<213> Homo sapiens

<400> 1455

```

gaattcgcgg ccgcgtcgac cggtttcggt agcgacggta gctctagccg ggcctgagct 60
gtgctagcac ctccccagg agaccgttgc agtcggccag ccccttctc cacggtaacc 120
atgtgcgacc gaaaggccgt gatcaaaaat gcggacatgt cggaagagat gcaacaggac 180
tcggtggagt gcgctactca ggcgtggag aaatacaaca tagagaagga cattgcggct 240
catatcaaga aggaatttga caagaagtac aatcccacct ggcattgcac cgtggggagg 300
aacttcggta gttatgtgac acatgaaacc aaacacttca tctacttcta cctgggcca 360
gtggccattc ttctgttcaa atctggttaa aagcatggac tgtgccacac acccagtgat 420
ccatccaaaa accctcgag 439

```

<210> 1456

<211> 557

<212> DNA

<213> Homo sapiens

<400> 1456

```

gaattcgcgg ccgcgtcgac ggggaataga tccacaaaag catgtatgta cttacaaacc 60
aagctgtaga gatcaagaaa agaacttaag tgttgatctc aagatttcta aattgtcaag 120
atttaccatg cattgtggtg gaactagtta aacttagag cttttggtat gtaataacta 180
tttctatg actgattaaa tgtttcaaaa gattgtgttc ttcaattttg gtgggttttg 240
atttttgttt ttttaactgc ctctcagatt atatttactt agtttaaatt tctttgcttt 300
attcattaaa gtataaaaac ttcaggctct tgatatttat ttactctgt ttactaatta 360
tttcaaaaac accctttgtt gacttttatt ttataaatgt gtaatgtatt aaacgtcttt 420
aaatttttgt tcaactgaaa ctacattaac ttgtattgac ttactggga tttttttta 480
aagacacttt ttccatgtca gtgcgcagca cttaaccagt cgtttgtatt ccctttctct 540
tcaatccaac cctcgag 557

```

<210> 1457

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1457

```
gaattcgcgg cgcgctcgac ctttcttgcg tcaacactta ctacattagc aacactgatt 60
agtttcagta aatgtacatg tataacaaag tatacatgta ctagtatata ctgtaaattt 120
tcaaatataa ctgaagcaaa tattttgtct tatgcagttg acaggggtatt ggtcagttac 180
agttgtcatt tgaatcagtg ctgtcttatt tacattattt tctagatagt ttgctatgta 240
ttttagggtac tttaatagct ctttaaatta aagaatgtca agggatgtgt gtggctaggt 300
gggtgtacac acacacatac atgaggtcgc tcatggattc aggtttgtga gtgtaattga 360
ttttaagtca tttatttgac aaccacacat tgtcacataa gcacagactc gag 413
```

<210> 1458

<211> 142

<212> DNA

<213> Homo sapiens

<400> 1458

```
gaattcgcgg cgcgctcgac gacctgcctc gattgaattc tagacctgcc tcgagccaga 60
gcccaccact actccaccca gctaccctcc agataggcac agtatggcca ggcttggcct 120
cacggtcagg gcctttctcg ag 142
```

<210> 1459

<211> 698

<212> DNA

<213> Homo sapiens

<400> 1459

```
gaattcgcgg cgcgctcgac attctgagag tatgtatgcc agtttgttgc atggatatat 60
tgctgaggtt tgggatatga atggtcccat aaccaggtg gtaagcatac taaccactag 120
atagttttta aatcctaccc tctgcccac tagtagtctc cagtgtctgt tgtgccatct 180
ttatgtccat gagtatgaaa tgtttagctc ccacttataa gtgagaacat gtgttatttg 240
gttttctgtt catgcgttaa ttcacttagg ataatggcct tatataatga agcccagctt 300
tcaaaaacca gaaattacag acacattttt ttttaaaaaa gagaccctcct attaaagat 360
aaagcaatca gtagaactag atcccgatat aaaggctata gtggaaaaga cagataatac 420
gtttgagcag attggaaatt tcggcacaga aacgttaaga aagattcaaa tggaaattct 480
ggaaatagac acattaacag atgaagaatg gctaagacct tcagattctt tagtagactt 540
aatgcagcta aagaaagaat gaatgaacct tgaatgtaga ttcatagaaa taccctaaact 600
aaaaggcaag gagaacaga acagagtgtc taagaattta ggaaaatcta aaactgtata 660
acatgtctac tagaatttca gaagaagtaa tcctcgag 698
```

<210> 1460

<211> 239

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (189)

<400> 1460

```
gaattcgcgg cgcgctcgac taccaactga gctgtaaaat tgtgacagtg tagcttattg 60
atccattgtc ttgttgata ttattaagca tgagatttgg ggtatttcc ttcttctctt 120
ccttctctcc ttcttctctt ctctctctcc ttctctctct ccttctctct ttcttctctc 180
cctctctant tctctctctt cctctctctc ttctctctct ccttctctct ccttctctct 239
```

<210> 1461

<211> 836

<212> DNA

<213> Homo sapiens

<220>
 <221> unsure
 <222> (509)

<400> 1461
 gaaattcgcg gccgcgtcga ccaaactctg cctacatgtt atctccaaag ccacagaaga 60
 aatttgtgga ccaggcttgt ggcccaagtc attcaaaaga aagtatgggtg agtcccaaga 120
 tctctgctgg acatcaacac tgggttcaga gcagctcgac ccccatcaac actcggattg 180
 aaccttacta cagcatctat aacagcagcc cttcccagga ggagagcagc ccatgtaact 240
 tacagccagt aaactctttt ggatttgcca attcatatat tgccatgcat tatcacacca 300
 ctaatgactt agtgcaggaa tatgacagca ctccagccaa gcagattcca gtcccctccg 360
 tttaaagtca tggaggctat aggatcttat gtaaacagtt tttgtttctg atagtaattg 420
 actttattct aacttgagat cagtggcgga tcaaaacctt caagattcaa ctgaaaagtt 480
 ggcagttatg gttttcttct atctgatgng tcagtatctg ttgatttgct ttgtagtttt 540
 gttgacatct taagattgat gtgaaagttt tagatttttt accctgctct ttgcctcagt 600
 cttttgtacc gagcctttta atagatgcca ggaatgaagc tactgtgtta aagtagaaag 660
 tcaaccgatt atcatgattt gagtcagtg tatgtgactt caaaataagg tattgactgg 720
 atttttttta aagaatgtga aaatatgatt tttgtgagg tgttattttt attaatgaa 780
 ttgtaaattt tgattttttg aagtgttgaa atcggaaca ctacacatag ctcgag 836

<210> 1462
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 1462
 gaattcgcgg ccgcgtcgac gcacagccaa gatgttttaa aagagtcata taagagaaat 60
 tgtaatectg ttttataaag aggacagtgc agggggaaag ctgtacccaa tccccctgta 120
 ttacaccccc cttccccaaa gataatcatt taagatttcc aaagtatttt ttttatttat 180
 ttgaaattat gtatgatttt attttcattt ctccaaagct ctagtagtct tttaatggtc 240
 aagaaaaatg tcacagggac aaatgtctaa taatgaacaa ctagttaaaa tagttgttta 300
 taagtctctg tcaacttgag ctttatggag gcgtgcataa tttccattgc gtgtgttggt 360
 aggatatata tacgcttttc cgacagcact cgag 394

<210> 1463
 <211> 864
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (581)

<220>
 <221> unsure
 <222> (583)

<400> 1463
 gaattcgcgg ccgcgtcgac aaaatatgaa gaaaacatag tatttcaggt cgtttgctcc 60
 cttatatcac ttatcagatt ttggggactt taaggacctt aattttcaaa aaaatcaagt 120
 tagatcatgg atttttttga aaacttgggt cattaaagtc ctgaagaaaa tttgaaaatt 180
 taagtcctta acgtccagaa gacgtttatt ttagactgta aagtaaagta aaaccaaggg 240
 ttaagggtag gtaactttct tttgttttaa acaatgggtat gtctatatct atatctatta 300
 tcattctatag gtatatagcg tctatgtgtg ctaaccacgc accaattggc tcccctagct 360
 tatagaagag accagtgaat tagaagtagg agatgtgagt tctaacccca tttctaccac 420
 taattagata atagaattcg aaaaactcat tgacttcttt cagcattggg tccctttgct 480
 gtaacatgaa gacattgaaa gaagtaactt tatgttagtt gtttctccag tatgttgtgt 540
 gtgtacctgg tgtggacctc acggtcaccc ttgccagaga nantagattt tttttttaag 600
 tctatactaa tattctttcc tcactagaaa ggatagtggg gtgtttactc tcagttgtaa 660
 ataactctgt tttctctgcc tgcattgcat tctgtctctc ctagccattt tataaatact 720

gaaaccagta atcatgattt aagtttttgt gtagactgca gctcatctgt tataaacaat 780
 aaaagctgag taaatatgtg ctaatgggtt taccataagt cctgtaggag cattctcttt 840
 accccattta ccccaatcct cgag 864

<210> 1464
 <211> 505
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (44)

<220>
 <221> unsure
 <222> (486)

<400> 1464
 gaattcgcgg ccgcgtcgac atctcttgaa cccgggagggc ggangttgcg gtgagcagag 60
 attgctcgat tgcactccag cctggggcaat gagcaaaact ccgtctcaaa aaaataaaaa 120
 taaaaaataa aataaaatag ttagctggcc atggtgggtat gcacctgtgg tcccagctac 180
 ttgggagggt gaggtgggag aactgcttga gctcaggagg tcgaggctgc agtgagccaa 240
 gatcacacca ttgactcca gcctgggcag caggacgaaa ctctgtctca aaaaaaaaaa 300
 aaaaaaaaaa aaagtccctc tcattgggta gatatagcca ggcttgcctc agtcattggc 360
 tggggaccac cctgagaaaa gcacaggata aaaacctgaa gctgatgctg aagacactaa 420
 cagggtggga gtgtccactt accatactcc ttgcagctga ggggtggctc cttctagaa 480
 gggggntctt accgacacc tcgag 505

<210> 1465
 <211> 711
 <212> DNA
 <213> Homo sapiens

<400> 1465
 gaattcgcgg ccgcgtcgac cttgcaggga agtggctttc tgccatgtag agccaggctg 60
 gcaacctgcc ctctgccatc agggagttag catgaacctg gaaacctcta ggacgcaaga 120
 gcgaggctgg ctgtcccttc gtgtgcagt cttagacctt cttgccacac atcccgtccc 180
 tcacctcact ggatagcccc cgaatcaact gttcacacga aagcagctgc ctgggtctga 240
 gtggccatgc tcaactccaa gcacaggctg aatgaaaaga aaactgtgca agtagcttgt 300
 atggtgggaa gccccagca gaggtgagg gtgcagccag gtgtcttga agccttgagg 360
 cctctggtgt catcttctc acctctaaat aagagatggg ctagggttgg caaggctctc 420
 cctgtcctaa aacactttaa tgaaatggaa gaaaggctgc aggtgatag aggagggaca 480
 gtctggtttg gttccctcaa gtcttcagga gagggctcaa ggacagtctc ccatttcttg 540
 ttggcaaaat gtaaaagtga gtctggacct tgtccattga gtagagactc aggaggccaa 600
 ccaagatccc tgaaaagcta acagcgtggt cagccttccc acagacagt caccaccgt 660
 gggaggacac ttcgcccccc attgttaacg tccaccgcgc ccgaactcga g 711

<210> 1466
 <211> 802
 <212> DNA
 <213> Homo sapiens

<400> 1466
 gaattcgcgg ccgcgtcgac acatatgatg tataaagaat ggtgcaggaa aataaatata 60
 aaagacagat ctcatctctg tctccgtgag ggagtagata ggacatgtat gtaaatgttt 120
 gtgcgtgtgt gtgtttcaca gctcttacac caatgccact ggccagttat gacatctcta 180
 tataacctcc ccacagaaag gatctaacag tactaagaaa ttgtggtatt ttgagctata 240
 caaatagttt ttgaaatttc ttctgaatga agacctttgg atttctaaaa gcacaaaaac 300
 aaggcttaca gagaaaaagg gtatctaaac tatcccaatt tcagactgac tgtatgacaa 360
 agatatactt acattgatat taccagttta tgtaattttt gcaggataaa tcacaagttt 420

```

gagtgtagt gctctcaatt ttggggggag gtagttgaat aaattttaga attctcttta 480
agaatagcca atacttatta agtgaaagtg tgccagatgc tatggtaggc attgagctta 540
taaaattgaa tatcaaattg tctctgccct taatgagtga caatccaggg gaggcagaag 600
tgtaataaag tatttataat aatgtataag ggttttgata tgctacttct atattttgca 660
tacatgcata gtaatatagg aaaggataag aagtattatg atataggaag caatatagaa 720
aatgaggtaa ttacattttt ctagaattgg gggagatgac ctataagtag aattttagac 780
gttgtaaagg gataagctcg ag 802

```

<210> 1467

<211> 433

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (249)

<400> 1467

```

gaattcgcg cgcgctcgac cagaagtttt atttacaaga tctcctgaat tattaacaga 60
ccttaaaaaa tccaaatgga aaacttctgt tatcaaatca ctgaaaatag catatatatc 120
tggttctacc aaaaaagaaa aaaatctggc agtattgacc agtttccaaa tgattaagaa 180
aagagtgtca agaaccagt aaaatacata ggaaaagggt gcccttttta tcctcctcca 240
ccacaccant ttggaaaaca ttttaggggt ctctattgta tttttctaata acattttacc 300
aattgtccag aaaatcaaat ccggtcttca agacgacatt acttgagctg acctgtgcaa 360
acttgggttc cgagaacagg gtgtcttccc catcgtcctg cctgacatca ggagatggca 420
gcttcccctc gag 433

```

<210> 1468

<211> 752

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (187)

<220>

<221> unsure

<222> (199)

<400> 1468

```

gaattcgcg cgcgctcgac gtgggatttt ccaagaaaaa agggtcagag tcctgggatg 60
actgctggca tcagggtgaa ggggtgaacac tgctctcagc tgatagggtc ctttccagcc 120
atcctgagat cttccacttt aaaactgcca taactcctct gccatccagc aggtgagatt 180
aactcanccg caccaatcng ttaaactagc cagagtccac tcacaaatta tccccagatg 240
acagattgtc tacaatatct tcaactacatt cacaaccttt gatattaata ggtatttggt 300
ccttaatgat attaccaatg ctaaaataag gaaaaagcaa tacaatggag gtaatgggtg 360
taaagggtgag aggtgtgtgt gtgtgtgtct gtgtgtgtgt gtcaatcggg aatgcttggt 420
atgtaaaaag ggaagaatca atactgtaga acactcacac gctgatttat cactaggcac 480
aaatctaaat tcagtaatag gttcaacatc atcatcactg tcttctctct attcatcagc 540
aacaggttct tttgattctt ctgaaaaata aaataccctt ttaaagtcatt tatttgactt 600
taaaaaaatg aagcatattg taaatctgaa taatgcaatt caattttaat ttccaattat 660
ggccgacaaa tttatttcca atgatgggtg ccaaattctg attatacagt gagcatccta 720
gaaaagcctt gcctcgatct cctgacctcg ag 752

```

<210> 1469

<211> 144

<212> DNA

<213> Homo sapiens

<400> 1469
 gaattcgcgg ccgcgtcgac agcggatatt agtgaatgga gattccaata taagggcatc 60
 tggaggcgtc tctcgtcac agaggcgccg caccagatct gtcgccacgc cagtgccag 120
 agagtggccc cagatgtact cgag 144

<210> 1470
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 1470
 gaattcgcgg ccgcgtcgac gtatgggtgt atactcataa gccttcagct tgctgtagta 60
 atcagaaaac ttgtttaga ggatggaaat gggcatcccg ttgagaatga tcccaaaagc 120
 aatgcagagg aaggcaaaaa acctgcccag gtgggtctct gggtagatgt ctccgtagcc 180
 cacggtggag atgctcaccg cggcccacca ccaggagtgg gggatggtag tgaagtgggt 240
 gctgggcaca tcgtgtcca cagagtagac agccgcagag aaagtgaaga tgcccatggc 300
 gatgaagagc agcaggcagc ccacctgctg gtagcactgg cgcagcgtga agccgaaggc 360
 acgcagtccg gtggagtggc gcgccagctt gaggatgcgg aagatgcgca tgaggcgcat 420
 gacgcgaac acctgacca ccttaccac gctgccacc gtctggccgc gttggtggcc 480
 ctgcgccgtg aagcactcga g 501

<210> 1471
 <211> 514
 <212> DNA
 <213> Homo sapiens

<400> 1471
 gaattcgcgg ccgcgtcgaca gcttgtaaag attctccaaa gaaccctaca tttaacctgt 60
 aagcagggtt acactctgtc ttgtaacctt ttgcatcatc ttctccgttc taccacactt 120
 atctacccta cagaatactg cagtgtgccg ggtggctttg acaagcctcc ttctgaatac 180
 ttctctatca aggactgggg caaaccggg gacttgtgga atctgggaat ccagtggcat 240
 gttccttctt cagaagaagt gtcttttgcc ttttatcttt tggactcctt tctcagcct 300
 gagctcgtca aactccagca ttgtggggat ggaaaacttg aaatgtctag agatgatatt 360
 ctacagagtc tgactatagt gcacaactgt ttaattggct ctggaaacct cctacctccg 420
 ttgaaaggag agccagttac taacttagta ccaagtatgg tgcctctgga agagacaaag 480
 ttgtatactg gacttgaata tgatctgtct cgag 514

<210> 1472
 <211> 485
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (87)

<220>
 <221> unsure
 <222> (90)

<400> 1472
 gaattcgcgg ccgcgtcgac gtgagtttag cttctgacct ttctcataggt tagtttttta 60
 taggagtgtt aaatataaat tagacctcn tagtgcataa ttgtatcaga tacttgaatg 120
 gtgcatgtcc agtagataat agtggtcttt gtttcgaggt tcatccattt tataacataa 180
 gtaatcctta atttcttctg aagagtgtta tagaacagga gcaccaaagt tcatccttag 240
 aatttttctt aatgcaaaaag gtatagtgt atatcttaca ctgggtcaagt aatctatgtt 300
 atttctgtca gataatataa aagttgattt aactttaagt cttttttctt ttgttctcag 360
 acagcaaatc aaaaggcctc cagtggataa tagatacaac gatagcttat cccaaagctg 420
 aacctataga tattcaaac tggtatcctt gatacaggaa accaacagtc acacatgttc 480
 tcgag 485

<210> 1473

<211> 814

<212> DNA

<213> Homo sapiens

<400> 1473

```

gaattcgcgg ccgcgtcgac gtaaagggtt gtaactgact acagcatgga aaaaaatagt 60
tcttttaatt ctttcacctt aaagcatatt ttatgtctca aaagtataaa aaactttaat 120
acaagtacat acatattata tatacacata catatatata ctatatatgg atgaaacata 180
ttttaatgtt gtttactttt ttaataactt gggtgatctt caaggtaata gcgatacaat 240
taaattttgt tcagaaagtt tgttttaag tttattttta gcaactatcg accaaatatt 300
tcatatattca cactttatat gttgcacata gcctatacag tacctacata gtttttaaat 360
tattgtttta aaaacaaaac agctgttata aatgaatatt atgtgtaatt gtttcaaaca 420
tccattttct ttgtgaacat attagtgtt gaagtatttt gacttttgag attgaatgta 480
aaatatttta aatttgggat catcgctgt tctgaaaact agatgcacca accgtatcat 540
tatttgtttg aggaaaaaaa gaaatctgca ttttaattca tgttggtcaa agtcgaatta 600
ctatctattt atcttatatc gtagatctga taacctatc taaaagaaag tcacacgcta 660
aatgtattct tacatagtgc ttgtatcgtt gcatttgttt taatttgtgg aaaagtattg 720
tatctaactt gtattacttt ggtagtttca tctttatgta ttattgatat ttgtaatttt 780
ctcaactata acaatgtagt tacgctacct cgag 814

```

<210> 1474

<211> 671

<212> DNA

<213> Homo sapiens

<400> 1474

```

gaattcgcgg ccgcgtcgac atgccaaata tcatttggtt tacttaacaa tattagtgtt 60
ttaaaatgat gagttataat tatttgaaca tatagatatg taacatgcc acaatcattt 120
ctaccatgca aggtgtataa gttgtttatt ttttagtgtt aaaactataa tagcttgaat 180
ataggtacca atgaacaaat tcaaattgca cctcttttct taaaagaatg ggatttaaac 240
tcttataaac attctttaac ttttttggtt gtttgtcttc ttttttccct tttgcatctt 300
tctagccagt gattgatctg ctaatgcttt ctttgccact ctaagtaaaa tttatttcac 360
ctcctcaatg aaaacctcat ggttttgctg gctgtttata actgcatcgc acttctagt 420
gtggcttgaa ttttcagtta agctttcatg gtatgtaatt ttccagcctt ttgagaaaac 480
aagcatacta taagtgaag agtgtttgtt ttccttggtt gtttgtttca tgctaggctt 540
ttcctggcag catgtccatt gcaggcagt gacaagaaac caccagcatt gagctaacc 600
agtacatgct aggacctgtc cttagagggc cacttttcat tacctgagtt atttgtacag 660
aagagctcga g 671

```

<210> 1475

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1475

```

gaattcgcgg ccgcgtcgac ctcatgcata tttgcatgtt tacagtctag gaactttaaa 60
cagttcttta atgccaag tcctaaacag atgttagctg ttagcttcc cattaataaa 120
ataagaagaa aaattatgct ctgagaggtt aaatgacttg ttttaaggta cacagtcagt 180
ggaaaagtct ggggttacag ccccaaatc taatttgtca tccccattta tatccttttt 240
tttaaattgt aaaatatgtc atatgtataa agtatattt aacataaacc cacaacttaa 300
agaataacaa attgaaggct tttctacttg ctaccagct taacaaaaag gagatttcta 360
gtacctttta agcctcttgt gaggtcctac ttgattgaat ctcccatctt ctctctccct 420
cagagataaa cagtttccca aattttatgt gaatcatttc tttgcttttc ttataacttt 480
taccaaatat gtgcatatcc ctaaacactc gag 513

```

<210> 1476

<211> 507

<212> DNA

<213> Homo sapiens

<400> 1476
 gaattcgcgg ccgcgctcgac attttcagtg taagataaat ggatgagtaa actcaaatat 60
 gtatcacgtg tgctttgtat cttaagatgt gtttccaaga gcattctgaaa ttttgtttgt 120
 acatgtatct tgatcattta taaagccact gtgatctata aatcaaaaaa atccattgtc 180
 ataaccattt ttaaaaagtca aaaatcaaga catccttaat taaaaagttt caaatctaga 240
 cactaaatgt gtgtgaatgt acaaagaaaa caaaccattg cttatgctgt tatatactag 300
 agaaattttg ttttgcttgc tgttttaact tgacagatga aggacttttag ttgaacttca 360
 tattgtaaga actgttaata aaagttgtca agtaaaaagc gctatatcta aaaagacttt 420
 atgaacagtt attctatcaa cttttaaagg ttttaaacct gccagaaaat taccttggtg 480
 tctgaagttt ccctctgtct cctcgag 507

<210> 1477
 <211> 826
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (113)

<400> 1477
 gaattcgcgg ccgcgctcgac tctatttttt cctcttgtgc ttctcttag cactctgaac 60
 ttgaaatttt agtgatcaac atcccagaaa ggctttttta aaaatttctt gtnggtgttt 120
 ctttttcccc aagaagaaag agccagagag aaaatagcta aagaattatg aatttacttc 180
 atagctttaa ttagtggcat acatattagt gtagtgtcta aaagagtttg cttgatcata 240
 atcgactgtc ccagtattat gccttacaac acatttcatt atcacataa tgaaataaga 300
 catgtgttta taagaacaat ggataagcct gttttctgac aaaatcatta actatgcaa 360
 agttctcttt ttttcttttc ctctgttaat aatgaatgct agctttcagt atctttaccg 420
 acttcatctc tgaattaatt ttgaccttag tcaaattgaa ttttggtatt agcctacttt 480
 ataaaccttt acattaatta agttgcata aagcacacta agttacacga ttaccaaaa 540
 atttcttttc atcatgcac acaacacttc ccgtgtgttg cataacttaa ygtgctcca 600
 tatctttgga atcaaatatt tggttaagctt caagaaaacc ctagaatcat ccacacaaca 660
 aacttaaatc agtttttact tatggaaatt ttagctagag accaggaaat atttaacttg 720
 agcccaaatt taataagatt tattactaat gatagtcag tttggataat agatagttag 780
 attaaggttg ttttaattgtt aactgatttg ttaactatcc ctcgag 826

<210> 1478
 <211> 365
 <212> DNA
 <213> Homo sapiens

<400> 1478
 gaattcggcc aaagaggcct agaagtagtg tgattaatag catcagagag ataaaagagg 60
 agattggaaa tttgaaaagt tcccattcag gtgtcttgga aattgaaaat tcagtagatg 120
 atctgagtag cagaatggac atacttgaag aaagaataga cagtctagaa gatcaaattg 180
 aagaattctc taaggataca atgcaaatga ccaaacagat aattagtaaa gaaaggcaaa 240
 gagatataga ggagagatct agaagttgca acattcgttt gataggaatt ccagaaaagg 300
 agagttatga gaatagggca gaggacataa ttaagaaat aattgatgaa aactttgcac 360
 tcgag 365

<210> 1479
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1479
 gaattcggcc aaagaggcct acagctctca agaggcagaa tttatataat aatcctttca 60
 actctatgag ttacaccagt ccttacagtc caaatgccag tagcccatag agcagtggct 120
 tcaattctcc atcctcaacc ccagtgcgac ctcttatagt caaacagctt atacttcttg 180
 gaaattcagg taacttgaag agctcagaca gaaatcctcc actcagtcct cagtcctcta 240

```

tagatagtga gttaagtgtc tcagaattag atgaagattc aattggatcc aattataagc 300
taaattgatgt aactgatgta cagattcttag cccggatgca ggaagaaagt ctccggcaag 360
aatatgcagc caccacgtct cggcgaggt ctggttcac ttgcaattct acaagacggg 420
gtacttttag tgatcaggaa ctgtatgcac aaagttaga tgatgaagat gacaatatgc 480
atcatgcagt ataccctgct gttaacaggt tttcaccatc accacgcaaa aacctcgag 539

```

<210> 1480

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (24)

<220>

<221> unsure

<222> (137)

<400> 1480

```

gaattcggcc aaagaggcct aacnacctca aggggtcatgg aagaaaaaga tgaatatagc 60
agcagtgaaa ctactggtga aaagccagag cagaacgatg atgacaccat aaaatctcag 120
gaggaagatc agccaanaat tattaaaagg aaaagaggaa gacctcgaa ataccctgta 180
gaaacaacgt taaaaatgaa agacgactcc aaaacagata ctggcattgt cactgtagaa 240
caatctccat ctagcagcaa actgaaagta atgcaaacag atgaatccaa taaagaaaca 300
gctaacctac aagaaagaag tataagcaat gatgatggtg aagaaaaaat agtaacaagt 360
gaactcgag                                     369

```

<210> 1481

<211> 397

<212> DNA

<213> Homo sapiens

<400> 1481

```

gaattcggcc aaagaggcct acaacaacaa caacaaaaac ccacaaaaat tagccgggca 60
tggtgacagc cacctataat cccagctact cgggaggctg acgcaggaaa attgcttgaa 120
cgcaggaggt ggaggttgca gtgagccaag atcgtgccac tgactctag cctgggtgac 180
agagcgagac tccttctcaa aaaaaaaaaa aaaaccccaa agtagacata aacttggtga 240
ggcaggcagc tataagaaga gtagcatgct aagggggaaca gcatgacaag aaaagtacat 300
aggaacacca gagtttggga agaagtagga aatgagatt agataagtga gatgggttct 360
aataggaaaa cctgggcatt actcgaggca ggtctag                                     397

```

<210> 1482

<211> 243

<212> DNA

<213> Homo sapiens

<400> 1482

```

gaattcggcc aaagaggcct atgaacaatg gcaactagct ggtctttgct tcagtttctg 60
ggactttgtg cctggtttg tgctttttgt tctgcttctc cacattggaa acatggacgt 120
catcctcatc atccccatcg ccctcatcat cctcatggat tgacggtgca gcaaagtgat 180
tatcttatta aggagattgt tcagccacag gtcagccaac cacttcctgt gcgtgggtctc 240
gag                                     243

```

<210> 1483

<211> 631

<212> DNA

<213> Homo sapiens

<400> 1483

```

gaattcggcc aaagaggcct accgtgcact gttcacatct tgggggtctag aggtcaagaa 60
caaagatcac agacaagacg ttactaaacg gacccctgca gtaggtcccg aattgcagaa 120
tcatccaatt ccagcatggt cagcacggag atattcacag aaagaaaccc agcaaagtcc 180
tctctgagcc gctagagtca acaagctttt catacacact atggagagcc cagcggccac 240
ataacccttg agaacacagt tccatgtctt ggctaacacg gctctcaccg ctggcctcaa 300
caccctggg ccattgctccc tctgctcttc catccccacc acaacgaaga aaggtatgac 360
cgcacgttat atatagtaaa gaagaacttt gagggcgcag gacaggggcg cagcagcaag 420
ctctctgggt agtgccttac tgcctcacc acctgagccc tggtccaagt gcaaggagct 480
tcccaaatcc tagagaaatga ctgtacttag aaagttttgt tttgtttaag agaaaatggc 540
tttcatgaa tttatgttcc tcatggcaga tatgttacac ttccctctac aacagaaaga 600
caagcccagg tggggcccg gcatcctcga g 631

```

<210> 1484

<211> 424

<212> DNA

<213> Homo sapiens

<400> 1484

```

gaattcggcc aaagaggcct acaacaccct cctagcctta ctactaataa ttattacatt 60
ttgactacca caactcaacg gctacataga aaaatccacc ccttacgagt gcggcttcga 120
ccctatatcc ccgcccgcg tccctttctc cataaaatcc ttcttagtag ctattacctt 180
cttattatct gatctagaaa ttgcccctca gaaattggct ggtggaaaaa aatcaaacat 240
gaagattgca gttttgtttt gttttttctt gcttatcatt ttccaaactg actttggaaa 300
aaatgaagaa attcctagga agcaaaaggag gaagatctac cacagaaggt tgaggaaaag 360
ttcaacctca cacaagcaca gatcaaacag acagcttgga attcagcaaa caacagtact 420
cgag 424

```

<210> 1485

<211> 535

<212> DNA

<213> Homo sapiens

<400> 1485

```

gaattcggcc aaagaggcct agcagaccat taaacagctc gaaaatacaa tcagtgaat 60
gagtcccaaa gccctagttg atacctcatg ttcttccaac agagattctg ttgcaagttc 120
atccccacata gcccaagagg cctctcccc acccttgcta gttccggatg aaggtccac 180
tgccctagag cccctacgt cgataccctt agcttcacgt aagggtcca gcggggcccc 240
acagacgagc aggatgcctg tccccatgag tgccaagaac agaccgggaa ccctggacaa 300
acccggcaag cagtccaac tgcaggatcc ccgccaatat cgtcaggcta atggaagtgc 360
taagaaatct ggtggggact ttaagcctac ttccccctcc ttacctgctt ctaagattcc 420
agccctttct cccagctctg ggaaaagcag ttctctgccc tcttctagtg gtgacagctc 480
taacctccct aatccacctg ctactaaacc atcgattgct cctaaccctc tcgag 535

```

<210> 1486

<211> 124

<212> DNA

<213> Homo sapiens

<400> 1486

```

gaattcggcc aaagaggcct acagggaaaa atgttacttt ttgtgtgtgt tttgctttgg 60
gaccttttta ttttgggtgt gcaaaaagta acatatcttc atcattgctt catacgacat 120
ggag 124

```

<210> 1487

<211> 521

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (391)

<220>

<221> unsure

<222> (471)

<400> 1487

```

gaattcggcc aaagaggcct aggcaactac acaggatgtt gcttaccagg acggagtttt 60
ggtatcttag tactgaagtt agcactatgt ttacatgcaa aagattaagg aaaaaaccct 120
taaagtggac aggtatccaa agttcatttt ctgtgactca tcaaagtgc aaaagacttg 180
taacaacttt gcctggactt ttttcatttt acaacagttc atccattcac agtgattttg 240
ttctctgctc catatttttt aatcccttaa gcatttgatg aaacactctt tagtgctata 300
tgcattttct tactttttgtt aaaaatgtga caattgtcaa aaaatgcact aaaatgtaaa 360
tggagattga acaagttcac tttccagctt nataggcaac tttatacaga cttgaacatt 420
ttctccagtt gtttagtaaa agtgaagag aaagggtttt tctgccaca nggatataac 480
ttttttttat ataacaagca taacacacca ctaggctcga g 521

```

<210> 1488

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1488

```

gaattcggcc aaagaggcct acgagacgct tggttataaa tacaggaaat aatttacttc 60
aaattaacaa ttaagttttt attttgtaac taaaaaaaaa atttccagaa gggtttgatt 120
ttctaaaatt taagtcattc agtaattact tacttgctgt ttgctcctac tccagccaca 180
aaccgtttcc gaggatacct gtctttaagt tgttttaag tcattctgtt ctgggctaca 240
accagacat caccaccttt tccaccttct ccacetaaac gaggataacc cattccaccg 300
gatcctcccc tgggtgaagag tcttagctta tcgatgaaat ttccatactt cctg 354

```

<210> 1489

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1489

```

gaattcggcc aaagaggcct acccccgctt ggccatagccc atctgcctcc acgtcgcttt 60
gccaagatg gccagtggcc caggcatggt ggggctcagg ctgcattgaa ggccacgacc 120
ctgggtcttc tgcaatacaa gtggttttag aaagtgcctc tcggctgact gcacgaacgc 180
ggtgctggtg gagcctgccc tcaccatgag gctgctgaac tccttggtca cgagaaaggc 240
catgagccag ttggtgagga cgcagatgcc tgtcgccacg cccttgacat gcagagggaa 300
gatctctgac atgaggagcc aggggatggg cccccagccc accgcaaagc ctgtggggagc 360
gagacaggca agacaggcat cagggctccg agggctgggg tcttcagctt gctgcagagc 420
caagagaccc agcttccag cctgtggggc tgtgggggtc cggatccccag tgtggtccca 480
ccagctccat gcttctctgc caaggcctcg gccagcctct tccctcctca ggcacaggct 540
ctgtctctga gatgggggtca caacggggcc tgctccgag 579

```

<210> 1490

<211> 520

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (432)

<400> 1490

```

gaattcggcc aaagagccta ggaagttcta tgttttgaac agaattcagc aattagtggc 60
attatgttgt tggttgtag gaagtatata tcatctaggc caggcacagt ggctgacgct 120
tgtaatccca gcacttgggg aggccaaagg gggcgatca cctgaggtta ggagtttgag 180

```



```

accagcctgg ccaacatggt gaagccctat ctctactaaa aatacaaaaa tttggctgag 240
ccaccagccc cagccatgat cagccttttg atgtctcctt ttgtcaaaag aaaattgtcc 300
ttgtgttggt ataaagacat atgctacagg agcagcattc tgaagacttc aatttcaact 360
atggctctac ttcttactag tgaaacccct ggagaagcaa cttaatgtct ctgaacctgt 420
tatctatcat tngtgaaatg ggagataaaa cttgcctgac cctaacccca gcactttggg 480
agggtggaggc gggcggatca cttgagggtca tatgctcgag 520

```

<210> 1491
 <211> 813
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (153)

<220>
 <221> unsure
 <222> (178)

<220>
 <221> unsure
 <222> (185)

<220>
 <221> unsure
 <222> (198)

```

<400> 1491
gaattcgcgg ccgcgtcgac ctaacatgga tagtaatttg aaaccagaag aggttgttca 60
caaggagaaa cgacgaacag agagagcttg ttagaagaga aacttgtgtt gaagtctaaa 120
tcaaaaactc aaggcaaaaca ggtaaaagtt gtngaaacag aattacaaga aggtgccnca 180
aaacnngcaa ccactccnaa accagacaag gagaagaaca cagaagaaaa tgactcagaa 240
aaacagcgta agtctaaagt tgaagacaaa ctttttgaag aaactgggtg tgaacctgta 300
ttagagactg cttctctctc agcacatagt acacagaagg attctagtca tagagccaag 360
ttaccattag caaaggagaa atataagagt gataaagact ccacttccac caggcttgag 420
agaaagtgtg cagatggcca caaaagcaga agcttaaagc atagtagtaa agacataaaa 480
aagaaggacg aaaataaatc agatgacaag gatggtaaag aagttgacag tagtcatgaa 540
aaggccagag gtaatagttc actcatggaa aagaaattaa gtagaagggt gtgcgaaaat 600
cggagaggaa gcttgtcaca agaaatggcc aaaggagaag aaaaatttag agcaaact 660
ttgagcactc ccagcggttc ctcccttcag agacaaaaaa agagtgggtg tatgacattg 720
atccctgaac aagagccaat ggaaattgat tctgagccag gtgttgaaaa tgtgtttgaa 780
gtatctaaaa cccaagacaa ccgcattcctc gag 813

```

<210> 1492
 <211> 450
 <212> DNA
 <213> Homo sapiens

```

<400> 1492
gaattcggcc aaagaggcct aatctaaagt tctgagactt attaaggtat taaagtaaca 60
gtttttattt gagatttagc ttgtgttata tggaattttt cattagcaca atgtgttgag 120
gtgagacttc atggaaagtt actgtaaaaa acaaaaaaaa gtccttactt ccattcagtt 180
taccatcatg gatccaaact aagggtaaag ccagtacatc ctaatatgtg cccaacccat 240
aactttaaat gattaaatga aacacacaac agggagatct attgttaatg tgttaaccaa 300
aattgccagg aattgcccta aaggggaaaa attgtttaat cagttaaaca gtgaggaaat 360
acaagattat aaattagaag tgttgctatg gtgttagctc ttacatccct gaacaacaaa 420
aaagacagtt caacccaag cattctcgag 450

```

<210> 1493

<211> 184

<212> DNA

<213> Homo sapiens

<400> 1493

```
gaattcgcgg ccgcgtcgac ggaacatct ttgttgtttg attcattccc agggagtgcac 60
tttggaaatag gggagactag agttttatact tctgggtgtg ttacttttact tgtgcaaata 120
gacagacatt ttaaaaaata ttatctttta catgagaaga gatattgaga aggctcgact 180
cgag 184
```

<210> 1494

<211> 656

<212> DNA

<213> Homo sapiens

<400> 1494

```
gaattcgcgg ccgcgtcgac cagcaaacaa cagtttttac accagtagca agacttccta 60
ttgttaactt tgattatagc atggaggaaa agtttgaatc cttttcaagt tttcctggag 120
tagaatcaag ttataatgtg ttaccaggaa agaagggaca ctgttttgta aagggcataa 180
ccatgtacaa caaagctgtg tggcgcctg agccctgcac tacctgcctc tgctcagatg 240
gaagagttct ttgtgatgaa accatgtgcc atccccagag gtgcccccaa acagttatac 300
ctgaagggga atgtgccccg gtctgtctcg ctactgtctc ctattctcta ctcagtggta 360
tagcattaaa tgatagaaat gaattttctg gtgattcttc agaacaaaga gaacctacca 420
atttacttca taagcaactg ccacctctc aggtgggaat ggaccgaata gtaagaaaag 480
aagcatttca atctgaggag gatgaagaag tgaaagaaga agatacagag caaaagagag 540
agacccctga atctagaaat caggggcaac ttacagtga gggggacagc agaggaggag 600
acagaaaaca gaggcctgga gaggagagga ggctggcaca ccagcaacga ctcgag 656
```

<210> 1495

<211> 210

<212> DNA

<213> Homo sapiens

<400> 1495

```
gaattcgcgg ccgcgtcgac cctcgacgga gacgtggcag gcgaagcggc tcagcagggg 60
gtgtttggtg atgaagccga aatagcagct gttgcgggga tggcagccgc agaaggagat 120
gttcttcacg tggaagaaat ggctgcagcg ctggaactca ggccctcctc cgctcagact 180
cagcttgacc ccccgaagag agatctcgag 210
```

<210> 1496

<211> 760

<212> DNA

<213> Homo sapiens

<400> 1496

```
gaattcgcgg ccgcgtcgac gatttggggg gttctttttg tttgcttggg tgggttggtt 60
ttattggggc tccccccctc aagttctctg atgggcata gtcaccctcc ggctgggggt 120
tctcatccgt gtcaatgtcc gagccgcaag cttattgcta agcacagggt acggccctc 180
tgtgtctcgg ggagcactgg ggatttgaaa atgccagtca gggttgttct ttacagaatt 240
cgttctctgta acaatagtaa tactaagggc tgcattctcag gctgaccaca gggcagggtg 300
caagtttaagt gttttcatgc actccctctc tcaccacctg ggaggcaggt atgattaacc 360
ccctgcagaa aaactcacag tgggggaagc gtgccggaac ccaaagtcca ggctccaact 420
ccctggacgt gacatgctcg ccagccgggg tacaccctgc acaatgctgg gagcatctcc 480
ttgatgcctc caccatcacc gcctggagcg ctgatccact cagcacattc tggctaagca 540
tctgtctgtg gccaggcccc gtgctgggca gtgatgggaa tgaaagatga gtttagatctc 600
atctctgccc ccggggagcc tcccatctgg tgggagacac agacacgtgg atctttgctg 660
gaaagggtaa caaggccatg gaaaccagc caggagcgtt ctagaaatcc atccactttc 720
aagtaggact tccatgcccc taacatccag cccactcgag 760
```

<210> 1497

<211> 711
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (110)..(111)

<400> 1497
 gaattcgcgg ccgcgtcgac cgggcgaacc caccctcggg atctgtcaag tctgtcccca 60
 ggggaggtcc ccttttcggg aggaagtgtt taaggggatt tctcaaaatn nccccgcgc 120
 ttccttcact ccttccttag agccggaggt cgcgcgcagg gaccatgtcg gcggagaccg 180
 cgagcggccc cacagaggac caggtggaaa tcctggagta caacttcaac aaggtcgaca 240
 agcaccggga ttccaccacg ctgtgcctca tcgcgccga ggcaggcctt tccgaggagg 300
 agacccagaa atggttttaag cagcgctggg caaagtggcg gcgctcagaa ggcctgccct 360
 cagagtgcag atccgtcaca gactaaggag atggcaggca ttgacagctt cactccatga 420
 aggccatctc tgtttctctc ctccgcttaa ccaagctgtt gtgggttttc agcatagtgt 480
 tgtatgttcc attgctagct gtctgtgtgt ttaacacagt gttgtatttt ttttctaaat 540
 gtacataatt agaaaagaaa ataacaatag gaagctatgt gtatcttctg tgtaaagcag 600
 tggcttcact ggaaaaatgg tgtggctagc atttcccttt gagtcatgat gacagatggg 660
 gtgaaaacca tctaagtttg cttttgacca tcacctccca gtacgctcga g 711

<210> 1498
 <211> 662
 <212> DNA
 <213> Homo sapiens

<400> 1498
 gaattcgcgg ccgcgtcgac ccaaacagag ttatctgggt ccacatccat gtgcccagct 60
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 ggcacaccag ccttactta tgagcttgat ggtcatcagc aaagactctc tccctttagg 180
 agggttctcc ttgggaacttt tcagtgtctt ggcaggaaag agatggcaca cacgaagcac 240
 tgattgaaga cagtttaatg aaagaatatt tacagaggtt gggcaagggt atggaaaaca 300
 acagggaaca gtaaaacacc cagggatgac aaggcaagggt agctcatgtc tgtaatctca 360
 gcactttggg aggccaacac aggcagattg cttgagccca ggagtttgaa accagcctgg 420
 caacataagc aagaatctgt ttatctacaa aaaataaaat aattaaaaaa aaattacctg 480
 gctgtggtgt tgacaccta tagtcccagc tactcaggag tctgagggtg gaggatcact 540
 tgagttccagg agtttgaggt tacaatgagc taggatcaca ctactgcact ccagcctagg 600
 cgacaaagag agatgctgtc tctaaaaata aaaaacaaaa acaaaactgcc cagggaactcg 660
 ag 662

<210> 1499
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 1499
 gaattcgcgg ccgcgtcgac gagactcgaa ctcaagttcaa taacgtgggtg aacaaattga 60
 ggctaattgga gcaaaagtgt cagcaagtag atgaatggct caaaacagca gaggagaaag 120
 ttagtcccag gaccagacgt cagtctaaca gggcaaccaa ggagatacaa ttacatcaga 180
 tgaagaagtg gcacgaagaa gtgactgcat acagagatga agttgaggaa gtgggagcta 240
 gagctcagga gatactggac gagagccacg tgaacagcag aatgggttgc caggccaccc 300
 agctgacttc cagataccag gccctgcttc tccaagtgtc ggaacaaata aaattcctgg 360
 agggaggagat tcagagtttg gaggaaatcag aatcatccct cagttcctat tctgattggg 420
 atggctctac tcataaaaac ttcaagaatg tggctaccaa gattgacaaa gtagatacag 480
 taatgatggg gaagaaattg aagacgttgg aggttttgc taaagacatg gagaaagggtc 540
 acagtttgc taaatcagcc cgggagaaag gagagagggc tgttaaatac ttggagggaag 600
 gcgaggcaga gaggttaaga aaggagattc atgatcacat ggagcagttg aaggaaactga 660
 ccagcactgt ccggaaagaa cacaggacgc tcgag 695

<210> 1500

<211> 626

<212> DNA

<213> Homo sapiens

<400> 1500

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gaattcgcgg cgcgctcgac cctagagggt atcctccttg ttagaactca ccagtgattc 60
cctagccagg cacaggccac acctccaaag acgttgctag agggtttcat gcagtttcca 120
tggacatggt cacctgcca tgtttaggat gaaagtcata aagttagggg aagggaagaa 180
agattaaaga ctgctatagt gaagtaatga gggagaaaga aattaaaagg aaggacacaa 240
agcacatttt aaacatgcat gaatcaaatt actgttgttt atgctgacag tgtttgttgc 300
ttaatgaact aaccacatca agcaaagata ggtttgactt cagggtctgc tggatctggg 360
gactcaaact gtatcatgca tccgactgtc tctgtttctg taaaacattg ctttattctg 420
ccttctattg ctataagtga ataataaga ctgggtaatt tataaggag agaggtttat 480
ttagccaca gttctggaga ccaggaggtc caagattggg cagctgcatt tgatcagctt 540
ctggtgaggg cctcgtactg ggtcttaacc cagcagagaa gaagaagggg aagtgggcac 600
aagcaaagac gtcaagcata ctcgag 626

```

<210> 1501

<211> 509

<212> DNA

<213> Homo sapiens

<400> 1501

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gaattcgcgg cgcgctcgac acttaaaact cccagtaaat cttggaataa atatattttt 60
ccttcccttg tagtttccat ggtagctgaa tgtgctcaga tgtgagcagt cagagactga 120
cagccatgct tctctatact tgttcaaagg atcgatggac cgtaataaag ctgccattaa 180
cacatctggt tactgctgta acatgactaa taaaaccgaa cgctgttcc ccttaccctg 240
gtgggggaca cgcagatgag tgaattggaa tgtccagcag agttaccctc ccaattatat 300
gttcattttg tatatttttt ggtcggggga aaaattgacc tgcagtaaaa aaacctttga 360
ccatttttat gtccattgga tactttcctt tttatcatct taaaaaaga taactagtac 420
taatcattgt agtggcctaa gtgtgattta actcttgaag tcacaccctc cgaaagatga 480
gtagaaacca gcaccagcac agtctcgag 509

```

<210> 1502

<211> 770

<212> DNA

<213> Homo sapiens

<400> 1502

```

gaattcgcgg cgcgctcgac gaaatgatgg aggaatccag tggaccatat tctgatggaa 60
cagaaaattc acaactaaat gtgaagataa gtggcatgga gagaaaatca aatggaaaaa 120
gagattcatt tttggcaca acaaagaata aaaaagaaaa tatgaaacca gcagccaaac 180
tgaaacttga atcttcgtct ttaaaagtaa agggtgaaat tcttttgtaa gagggaaaagt 240
ctactgactt tgtgtttata cctccagaag gaaaagatgc aaaggaaaga atattaactg 300
atcatcaaaa agaagttctc aaaacaaagc ggtgtgatat tcctgccatg tataataatc 360
tggatgtttc ccaagatacc ttatttactc agtatagtca ggaagagcct atggaaaattc 420
ctactttaac cagaaaacca aaggaggatt ctaagatgat gattacggag gagcaaatgg 480
acagtgacat tgtcattcct caagatgtca cggaagactg tggataggct gaacatcttg 540
aaaagtcttc ctttcgaat aatgagtgtg gttctcttga caaaaccagt ccagaaatgt 600
caaacagtaa taatgatgaa agaaaaaag ctttaatttc atcaaggaaa acatcaactg 660
aatgtgcatc tagtacagaa aattctttcg ttgtcagcag tagttcagtt tctaatacca 720
ctgttgctgg aactccccca taccctacaa gtcggaggca tgaactcgag 770

```

<210> 1503

<211> 870

<212> DNA

<213> Homo sapiens

<220>

<221> unsure
<222> (147)

<220>
<221> unsure
<222> (168)

<220>
<221> unsure
<222> (182)

<220>
<221> unsure
<222> (336)

<220>
<221> unsure
<222> (339)..(340)

<220>
<221> unsure
<222> (386)

<400> 1503
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aacaaggaaa ggtaatcatg cctcttgga gtaagttaac gggcgtgatt gtggaaaatg 120
agaatattac caaagaagggt ggcttantgg acatggccaa gaaagaanat gacttaaatg 180
cngagcccaa tttaaagcag acaattaaag caacagtaga gaatggcaag aaggatggca 240
ttgctgttga tcatgttgta agcctgaata cagaaaaata tgctgaaact gtcaaactta 300
agcataaaaa gaagcccagg taaagtaaaa gacatntcnn ttgatgttga aagaagggaat 360
gaaaacagtg aggtagacac cagtgttgga agtggtctgt caccctctgt ttacaccaa 420
aggaacggac aaactgagga tgtggcaact gggcctagga gagcagaaaa gacttctgtt 480
gccactagta ctgaaggga ggacaaagat gtcaccttaa gtccagtga ggctgggcct 540
gccacaacca cttcttcaga aacaagacaa agtgaggtgg ctttgcttg caccagcatt 600
gaggcagatg aaggcctcat aataggaaca cattccagaa ataacctct tcatgttggt 660
gcagaagcca gtgaatgcac tgtttttgct gcagctgaag aagtgggggc tgtgtgcaca 720
gagggatttg ctgaaagtga aaccttcctc acaagcacta aggaagggga aagtggggag 780
tgtgctgtgg ctgaatctga ggacagagca gcagacctac tggctgtgca tgcagttaaa 840
atcgaagcca atgtaaatag cgtgctcgag 870

<210> 1504
<211> 713
<212> DNA
<213> Homo sapiens

<400> 1504
gaattcgcgg cgcgcgtcgac gtgaacaaat attagtataa gcatcagatg tgcaaaattg 60
gggtctaaca gaacactgtc cttggggcct tcatacaaag aaaaatgcac tgaaggccgg 120
gcgcggcagc tcacgcctgt aatcgcagca ctttgggagg ccaaggcagg tggatcactt 180
gaggtcagga gttcaagact agcctggcca acatgatgaa gcccactctc tagtaaaaat 240
acaaaaatta gctggaagcg gtggtgcaag cctgtagtcc cagctactcg ggaggctgag 300
gttggaagaat cacttgaacc ctagaggcgg aggttgagat gagccgagat cgtgccactg 360
cactccagcc tgggcaacag agcgagactc catctcaaaa taattaaaaa aaaaaaatag 420
aaaaatgcaa tgaagtgtta ttgagcggtt ttaagggaga aggcaaggat ggcacacca 480
gtcgggtcac ttgtgcatcc agaagagatg gaaggtgttt caagtgaagg aaatcatatg 540
agtaggggga ggaggtggca aatatgcctg cgtatccaca gaactcacc accgtgtgtg 600
gagtgaggac tgccacgtgg gcgtgggtgg gttgcatgga tcgacttggg tgggcaagtg 660
gaggaaggcc tgagatccta cgaacacaga ggcagtcacg aagtgggtctc gag 713

<210> 1505

<211> 682
<212> DNA
<213> Homo sapiens

<400> 1505
gaaattctca ggcagtcaga ctgtcttagg caaatcttga taaaatagcc cttatccagg 60
tttttatcta aggaatccca agaagactgg ggaatggaga gacagtcaag ggttatgtca 120
gaaaaggatg agtatcagtt tcaacatcag ggagcggtag agctgcttgt cttcaatttt 180
ttgctcatcc ttaccatttt gacaatctgg ttatttaaaa atcatcgatt ccgcttcttg 240
catgaaactg gaggagcaat ggtgtatggc cttataatgg gactaatttt acgatatgct 300
acagcaccaa ctgatattga aagtggact gtctatgact gtgtaaaact aactttcagt 360
ccatcaactc tgctgggtta tatcactgac caagtttatg aatataaata caaaagagaa 420
ataagtcagc'acaacatcaa tcctcatcaa ggaaatgcta tacttgaaaa gatgacattt 480
gatccagaaa tcttcttcaa tgttttactg ccaccaatta tatttcatgc aggatatagt 540
ctaaagaaga gacacttttt tcaaaactta ggatctatgt taacgtatgc cttccttggg 600
aactgccatc tcctgcatcg tcataggggt aattatgtat ggttttgtga aggctatgat 660
acatgctggc cagcacctcg ag 682

<210> 1506
<211> 668
<212> DNA
<213> Homo sapiens

<400> 1506
gaattcgcgg ccgcgtcgac gtctcactct gttgcccagg ctggagtga gtggtgtgat 60
ctctgctcac tgcaacctcc acctcccagg ttcaagtgat tctcctgcct cagcctccca 120
attagctggg attacaggcg tgcaccacca cactcagcta atttttgtag ttttagtaga 180
gacgggggtt tgccatgttg gccaggctgg tctcaaattc ctgacctcaa gcgatctacc 240
ctccttggcc tccc aaaatg ctgggattac aggcgtgagc catcgtgccc agccttcauc 300
cggtagttta atgtggcttt gtagaagaat cagtatttcc ctccttagag tccctctgtg 360
acttactttc taacatagct cactgtatc tcacaggacc ccgatgccc cagcccccac 420
ccttcccaaa ttcacccgct tcttcccctt ctcttcgggt ttactctgct ttagecgtgc 480
ggatcttctt tccattatgg aatatgtccg gactactccc acccgtcaga ttttgtactt 540
gtggttccca ctagaagcat ccagaatgtt tttcctctct accctcccc attcttctat 600
tggatgacct tattctcatt cttctggtaa taatcagggt taacacctct ctgaccacct 660
cactcgag 668

<210> 1507
<211> 636
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (48)

<220>
<221> unsure
<222> (137) .. (138)

<220>
<221> unsure
<222> (147)

<220>
<221> unsure
<222> (159)

<220>
<221> unsure

<222> (161)

<400> 1507

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gaattcggcc aaagagccgt agatttttat tctgcccatt aacagtgnnt tgaacccaat 60
tctctatact ctgaccacaa gaccattttaa agaaatgatt catcggtttt ggtataacta 120
cagacaaaaga aaatctnntg gacagcnaag gtcagaaanc ntatgctcca tcattcctct 180
gggtggaaat gtggccactg caggagatgc cacctgagtt aatgaagccg gaccttttca 240
cataccctg tgaaatgtca ctgattttctc aatcaacgag actcaattcc tattcatgac 300
tgactctgaa attcatttct tcgcagagaa tactgtgggg gtgcttcacg agggatttac 360
tggtatgaaa tgaataccac aaaattaatt tataataata gctaagataa atattttaca 420
aggacatgag gaaaaataaa aatgactaat gctcttacia agggaagtaa ttatatcaat 480
aatgtatata tattagtaga ctttttgcac aagaaattaa gagaaatcta cttcagtaac 540
attcattcat ttttctaaca tgcatttatt gagtaccac tactatgtgc atagcattgc 600
aatatagtcc tggaagtaga cagtgcagaa ctcgag 636

```

<210> 1508

<211> 837

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (754)

<220>

<221> unsure

<222> (806)

<400> 1508

```

gaattcggcg cgcgctcgac aaatcctcaa gctggccttt aataattttt atgtccagca 60
tttttttcat gcaattcatt tctaagggtc aatttttttc ttccataaagt gtcacctttg 120
gtagattttt cttcagggtc tgcaattagt aaattttctc attgattaca tatttgaaaa 180
gggtctgtag tcttgctggg tatagaattc aagatgatga ttacattcgt ttgctacttt 240
gaagatgtta ttttctcaaa ctattagatt ctggttctat taaagactgc tgttggtcta 300
acagtttctc tgaggtaatc tgcccttgat ttatgcttgc ttttaagatt ttctccttgt 360
ctgcgatgcc ttacatgttc actataatgt gggtcggggg attgatttat tacttgtctt 420
gctaagggtc gattgactgt cataacccta gaatttatca tttctggaaa actgcaaatt 480
tggaataaatt attcaagttc ccgtgttagt ccacttctca aaaccttca gtgtctccct 540
catttactgc cagtattact actcaggact ggcatgatct agcccttgca catttctgta 600
attaagtttc ccattaattc catttctgtc tgccaggaaa tccccatgac tcaaactggg 660
gatgctatct cttgttcata actcagctca actttaccta cctctctaaag ctttctctga 720
aacctgttct tctccctagc cactctctgt ttgngtacc actctttcct gctcataggt 780
ctgttagtta ttgcatttat ctattnatgt gtaaaatttt cccctctgag actcgag 837

```

<210> 1509

<211> 125

<212> DNA

<213> Homo sapiens

<400> 1509

```

gaattcggcc aaagaggcct aattttatgc atttggtttt cttatttttt tgggtgtctc 60
agttatctcg catgttattg agttttttta agatgattgt tttgaattgt caggcaattc 120
tcgag 125

```

<210> 1510

<211> 760

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (349)

<400> 1510

```

gaattcgcgg ccgcgtcgac cgactccagc atccagtgtc accatcatgg ctacagatac 60
agcccagcag agcacagtcc ccacttccaa ggccaacgaa atcttggcct cagtcaaggc 120
gaccaccctt ggtgtatcca gtgactcacc ggggactaca accctggctc agcaagtctc 180
aggcccagtc aacactaccg tggctagagg aggcggctca ggcaacccta ctaccaccat 240
cgagagcccc aagagcacia aaagtgcaga caccactaca gttgcaacct ccacagccac 300
agctaaacct aacaccacia gcagccagaa tggagcagaa gatacaacna actctggggg 360
gaaaagcagc cacagtgtga ccacagacct cacatccact aaggcagAAC atctgacgac 420
ccctcacctt acaagtccac ttagcccccg acaaccctt tgcacgcatc ctgtggccac 480
cccaacaagc tcgggacatg accatcttat gaaaatttca agcagttaa gcactgtggc 540
tatccctggc tacaccttca caagcccggg gatgaccacc accctaccgt catcggttat 600
ctcgcaaaga actcaacaga cctccagtca gatgccagcc agctctacgg ccccttcctc 660
ccaggagaca gtgcagccca cgagcccggc aacggcattg agaacaccta ccttgccaga 720
gaccatgagc tccagcccca cagcagcacc aactctcgag 760

```

<210> 1511

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1511

```

gaattcggcc aaagaggcct acttctctag acaaagaggg tctgtcagca ttaagctggg 60
cttgtctgaa aggtcacagg gcagtggctc agtatctggt tgaagaagga gctgcaatag 120
accagacaga caagaatggc cgcacacctt tggacctggc tgccttctat ggcgatgccg 180
agactgtgct gtacctggtg gagaaggagg ccgtgatcga gcatgtggac cacagcggga 240
tgcggccctt ggacagagcc atcggctgcc ggaacacatc tgtagtgtg ggcctactca 300
gaaaggaggc caagttagga aatgctgctt gggcgatggc cacttccaaa cctgatattc 360
tgattatact tttaacagaa ttaatggagg aaggaaatgt gatgtacaa aaagggaAAA 420
tgaaagaggc agcccagagg taccagtatg ccttaagaaa gtttcctcga g 471

```

<210> 1512

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1512

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gaattcgcgg ccgcgtcgac gttaattcta gtactgtact atcatgttaa ctttttttgg 60
tgacatagcc tggtagtagt gataagttta tttcatcgat tctctcattt gtttctgaca 120
gcacagagag atgtatatct tctttcttct tttatttttt ttgagacaga gtctcactct 180
gtcgcccagg ctggagatca gtgtgacacg atcttggtc actgcaacgt ccacctcccg 240
gaatctcgag 250

```

<210> 1513

<211> 620

<212> DNA

<213> Homo sapiens

<400> 1513

```

gcagttgacc tagaccagtt ccagtatttc cagtttgacc gtgtttgacc tacactgagc 60
ttcgggtgct cagtggctcat aatttttagca agtggaccta taggaagcaa ccctgggagg 120
gaccgtcctt ctgcagaggg ctgcccggcat tgaggctatc aatccccagg gcttggggag 180
caggagggga gggcaccagg tgctcttact ctccctgagct ccttttgatg cgtaagcttt 240
gtttttggcc ctctttgaag gcagggccaa acttttctta gtgcctetca ccttaggggtg 300
gccctccagg gaagggtgct cttgaatggc tggattggcc ctgcccaccg tcaaactgct 360
acatgtagga atagctgatg aggaaataca caaggcctca gtgccccttg gcctctttac 420
aaaaggagaa gttggaaggg gattgtggga ggagcccctg ggggcctggg ctgtctctca 480
ccagaacttg gagttgctgc cagcagagga tctgtgcctc agctgaagac tagctccgga 540

```


atgtcatagg ggtgtgactg tgtaggcctt ctctctctcc tcgtttctgt ggcattggcac 600
agggttgccctg gttgctcgag 620

<210> 1514
<211> 236
<212> DNA
<213> Homo sapiens

<400> 1514
gaatttcgagg ccgcgtcgac cccatttaaa aagttatatt ttattattat tgagttccctt 60
atagtttcta gatataagcc cccctatcat acatgcttta cagaagtttt taccattctt 120
gtggaatata tatattttta tttctttgca tactctttct gccccaccca catectcttt 180
ctgggacact gatgacacaa atgttgaatc ttttactatt gtccccgagc ctcgag 236

<210> 1515
<211> 320
<212> DNA
<213> Homo sapiens

<400> 1515
gaatttcgagg ccgcgtcgac atgaggctct gcctgtggag atgcaggcac ctgagccaag 60
gcgtccagtg gtccttgctt ctggctgtcc tggctctctt tctcttcgcc ttgccctctt 120
ttattaagga gcctcaaaca aagccttcca ggcattcaac cacagagaac attaaagaaa 180
ggtctctaca gtccttgga aagcctaagt cccaggcacc cacaagggca aggaggacaa 240
ccatctatgc agagccagtg ccagagaaca atgcctctca cacacaaacc cagccaagg 300
cccacaccac cggagacagg 320

<210> 1516
<211> 263
<212> DNA
<213> Homo sapiens

<400> 1516
gaatttcgagg ccgcgtcgac attctagacc tgcctcggtc accccctctc tgccttggtc 60
acccctctcc tgcctgtgct ctgcctcagt taccctctct cctgcccatt ttctgcctgt 120
tacaccaact cctgcccttg gtcacctgc tectgcctgt gctcggtctc agtcaccccc 180
ctcctgcctc agtcagcccc tctctacct atgctctgac ttggtcacc cctctcctgc 240
ctcagccacc cctctcctc gag 263

<210> 1517
<211> 729
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (33)

<220>
<221> unsure
<222> (36)

<220>
<221> unsure
<222> (96)

<400> 1517
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tgagtccaaa tctctcaggg aagaggctca gcatangtcc tgcgtcctct aagtcagttc 120
aactgggact gggaggacca ggggtgctgag atgcggcaga gacaaggcct aggacttgga 180

```

agtcttacta gaacatggtg gctccgcacc ccgcatagcc acgtggctgg ggtgtgagag 240
caaagaggca ggctgcaaga caagggagtt tgaacacgtt gtcgttgaaa gaattaaacc 300
agggtgtgtgc ctgagcacct ttagccact gctggcttc agaaatgcaa gcttgctgc 360
cgtccacccc aggcccttaa ataatacaag ttaattgaaa gagtttaatt tgaattaatg 420
agattctgtt aaaatattgt taacagttaa gtagataatt attctatgaa caaaacaaat 480
ggctcctgca gggctctatgt caatgaatag acaccttcat ttacagttag gatccttcaa 540
ctccaacaga atgatgtaaa tctgttattt gcagaggatt aattaagagg gaaatgaata 600
aaaacagtaa caaacaggtc cccgtctaga tgcagcgggc gggtgacagc aggctctcga 660
ccgttggttc gatgcaaagt gtaaataatg cattttgccc ttacctttgc cttcaccgac 720
taactcgag 729

```

<210> 1518

<211> 183

<212> DNA

<213> Homo sapiens

<400> 1518

```

gaattcgagg ccgcgtcgac gccagcagtt cgcagcatgg actcgggtatt ggtatttgtt 60
acaggtaatt ggcttctgct cacattaatt aatttattgg aggcctgggtc tctctcttct 120
accacaagctg cagtgcgggtg gtgccatcat agctcactgc agcctcaaac tcctgggctc 180
gag 183

```

<210> 1519

<211> 692

<212> DNA

<213> Homo sapiens

<400> 1519

```

gctcgatgtc gctgttcttg caggtcttct gcatggcctc ctgcttgctg ctttcacat 60
tgctgggtga tggcatctca tcaactggccc atttagagaa ctccaggtgtg atgcgcgtgc 120
tgggagggcc gccatttagg actgcgccc gaagtgcctc tctctcttg gcttcaccag 180
gctcctcgcc tgtgcagggg atgacatcag cctctgtgta ttgtggcttc ccatactcca 240
gagtgatcgc cccatccaca tccaagtcag catcactgtc cgggttctct ttgccgctgc 300
acatgatgaa gccagagcct cgggaagccac cttccaggag agtgggtggc cgtatccgct 360
tctgtccaca ccaactcaca tcctcaaaagc ggttggtgtt ctcatgctcg atgtccacag 420
catcatcttc agccatgcag gagccttccc tctgcccttc atcttgcttc ctccgtttca 480
tttcccaat ccgagcattc agtcgggtct gccggttggc tcgtactcgc agaaaggctc 540
ggatctgtgc tgaatgggtg aggtcatcgg tggcagatga gtgggtgat gccgttgagg 600
actctcttc cctcttgatg gaagcagaca acaggaggga ctttgggggtg cctggagcca 660
tggcatcctt cagaaggga ttcttgctcg ag 692

```

<210> 1520

<211> 277

<212> DNA

<213> Homo sapiens

<400> 1520

```

gaattcgagg ccgcgtcgac ccaactcccg ctaattttgt atttttggta gagatagggt 60
ttctccatgt tggtcaggct ggttttgaac tcccgacctc agatgatcca cctcagcctc 120
ccaaagtcct gggattacag gtgtgagcca ccgtgccggg cctttctctt tttttttttt 180
tttttttttt aagagactaa gtcttgctct gtcaccgaag gtggagtgcg gtgacagcat 240
catagttcat tgcagtctca aacaccagg tctcgag 277

```

<210> 1521

<211> 261

<212> DNA

<213> Homo sapiens

<400> 1521

```

gaattcgagg ccgcgtcgac caaggatatt agaactgtgt ggttccgcgt gcttccgtct 60

```

tgagttatgt gctgctattg tcggatattt tgtccttagat gtacgtactt tcctgttcat 120
 tgtgggtatgt gtaatttgcg ttactttgaa ttttccacgt ttttactttc tttgtctctc 180
 atcacttact gcttttggga ccccccccat cgggggttcac attcctctc cctagagcac 240
 actcccttgg atttctctga g 261

<210> 1522

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1522

gaattcgcgg ccgcgtcgac atttaattta catatgtcct tggcatccac aaatattgct 60
 tctcctttca accagcatgc cacccttcca gccattcaca tatgtattca ttcattcatt 120
 catttattct ttcattcagt caataaatat ttattgagta gtaatgcact cgag 174

<210> 1523

<211> 512

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (27)

<400> 1523

gaattcgcgg ccgcgtcgac gacggangca gctttctagg gctggaagtc tcaaatagaa 60
 ctcacctgtt ccccaaccag ggggtccccag gttcagctca attgttatca tgggtaccag 120
 ccaggaagct gtttgtggga aggatgggac ttaactcagg agtgttttag gtatggacat 180
 gtgtcagtat tcacaaaaca ggcaatatat tcattataga tgcaatcatg aaacttcctt 240
 ccagagaagg ctcacatctc ccccttcacc taggaagctc cttagcttga aggccacca 300
 cggctcgtac ccagcctcca cccagcccca aatgaactcc catttaattc cttggacatg 360
 ccattgacgt caccggtctg catacttgcc aataactgtt cttccagcct acctgtcttg 420
 ctccctgccc cactgtcct tgtcaaagga acgataactc ttcagctttg tcaagtcctt 480
 gtttactcct gttctcccca ccaggactcg ag 512

<210> 1524

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1524

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt cttagaccgc ctccacccaa 60
 taagcaaact ggagattcct cagcctctcg tggacacca catctcattc ttctcacagc 120
 agagaagctc tcccttcagc ctgagctgtc ttctttctgc tgcagtgcag cctgctccct 180
 cctaccctgg cctcaaggaa ggtgggaaac atcttctgca ttccaaagtc ctcactttga 240
 cttatttggc cttcatcttg gcatggaagg tggcaggcag aatggaaata ctccccccaa 300
 acaaaacaga tattcttgcg tgtgtaaggg cagaaggagc aagctctcta tcccatgaga 360
 ctaggggcgg gagccacct gcctttcccc acaacttttc ctgctcaaac ccggtcctcg 420
 ag 422

<210> 1525

<211> 108

<212> DNA

<213> Homo sapiens

<400> 1525

gaattcgcgg ccgcgtcgac tgaaagaatg cgcttctgtg ttgtaattcg tgctgtagtt 60
 gcatctgaat ttgtgctggt gactgtggtg ggtgatgtgc aggttgag 108

<210> 1526

<211> 124

<212> DNA

<213> Homo sapiens

<400> 1526

```

gaattccttc gggtcgactt cccaactcaa ttacagaact gaacagatct ccacacttac 60
ttttcagtga tagtcattgc aaaactacac tttaagaaca acttggaaga tgctttttct 120
tctt                                     124

```

<210> 1527

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1527

```

gaattcgcgg cgcgctcgac aaaggctgca catcaacaac aacaagatca agtcttttcg 60
aaagcagact tttctggggc tggacgatct ggaatatctc caggctgatt ttaatttatt 120
acgagatata gacccggggg ccttcagga cttgaacaag ctggaggtgc tcattttaaa 180
tgacaatctc atcagcacc ccttgccaa cgtgttcag tatgtgcca tcacccacct 240
cgacg                                     245

```

<210> 1528

<211> 276

<212> DNA

<213> Homo sapiens

<400> 1528

```

gaaaagtatc tcatatatag tatgtcccaa atagaatcat tgagttcccc cttccctcc 60
ctaaggcttc accatcagct ttgtgacttt ctattttctac ccatttggtc tgaactctac 120
ctgtcagcct caatctctct tgttctttca ctgtccaaat ctgccttccc tccctcatcc 180
aagacatggt tgattcttgt ctggactctt gaaacaggct tgtacttcac acttctacct 240
tcactgttgc ttctgcagtc aatcgatccc ctcgag                                     276

```

<210> 1529

<211> 139

<212> DNA

<213> Homo sapiens

<400> 1529

```

gaattcgcgg cgcgctcgac atccggctta cttttttatg tttttacaa ctttcatttt 60
tatcatctgg cttacatttt tacttttact atcagactta gatctcttaa aaaagagaga 120
gttttaggagt attctcgag                                     139

```

<210> 1530

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1530

```

gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagaaac 60
ccctcacaat catggcaagc caacgccact tatccagtga accactatca cgaaaaaac 120
tctacctctc tataactatc tccctacaaa tctccttaat tataacattc acagccacag 180
aactaatcat attttatatc ttcttcgaaa ccacacagct cgag                                     224

```

<210> 1531

<211> 586

<212> DNA

<213> Homo sapiens

<400> 1531

```

gaattcgcgg ccgcgtcgac acagaaacta ccatttgaca ccacggacct cattacatac 60
agcatctagt acaatgtaca gtaataccaa tccattacgg agtaattctt ctcttcattt 120
tgcatacatca aaccaattga gattatcaca aaacccaaac aattaccagc tacaggaccg 180
cactcagttc agtgaccgag acttagccac ccttaagaag tattgggaca atggcatgac 240
cagcctgggc tctgtttgta gagagaaaat tgaagctgtg gcaactgaat taaatgttga 300
ctgtgaaata gttcggactt ggattgggaa tcgaagaagg aaatatcgtt taatggggat 360
tgaagttcca cctccaagag gaggccctgc tgatttctct gagcagcctg agtctgggtc 420
tttatctgca ctcacaccag gagaggaagc tgggcctgaa gtaggagagg ataatgacag 480
aaatgatgaa gtatccatct gtttgtctga aggaagctct caagaagagc ccaatgaagt 540
tgttccgaat gatgcaaggg ctcataagga agaggacccc ctcgag 586

```

<210> 1532

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1532

```

gaattcgcgg ccgcgtcgac atgaaggaac aggagaaagg agaagggagt gatagtaagg 60
agagtccaaa aaccaaatac gatgaatcag gggaggaaaa gaatggagat gaggattgcc 120
agcgaggcgg gcagaagaag aaaggaaaca aacacaagtg ggttccatta caaatagaca 180
tgaagcctga agtgcccaga gagaaactgg cttcacgccc cactcgccca ccggaaccac 240
tcgag 245

```

<210> 1533

<211> 208

<212> DNA

<213> Homo sapiens

<400> 1533

```

gaattcgcgg ccgcgtcgac ggcagaccca tctatttgtt gcttctgccc tgctatagac 60
agagaatcag acaaccaaac tcactggaat gatgtgtaag gaaggagagg cagcctttga 120
aggggtgaca ggtacaatcc tgttaacttg ttcatatct ctgagcttgc tgctgtctgt 180
tctggctgct gaacccacag ctctcgag 208

```

<210> 1534

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1534

```

gaattcgcgg ccgcgtcgac caagccattg tatttatatt cctaaatatt gataatttat 60
aacctttgat tatctagtga gttgttgacc atttcttatt ttaaagtatt tcagtgtata 120
ataatataat atataatttt ttcattgtgt ttgcaaat ttttatgtgc tttgcaata 180
ttttttccca tctcttcatt tgctggttga ttctgtttat gctgttcttc cccccactcg 240
aggca 245

```

<210> 1535

<211> 276

<212> DNA

<213> Homo sapiens

<400> 1535

```

gaattcgcgg ccgcgtcgac ggagcaactt catataatgc aagaacagca gaaatctttg 60
gatataaggaa atcaaatgaa tgtttctgag gagatgaaag ttacaaatat tgggaatcag 120
caaattgaca aggtttttta caacattgga gcagaccttc tgactggcag tgagtccgaa 180
aataaaggagg acgggttaca gaataaacat aaaagagcat cacttacact tgaagaaaaa 240
caaaaattag caaaagaaca agaacaggca ctcgag 276

```

<210> 1536

<211> 107

<212> DNA

<213> Homo sapiens

<400> 1536

```

gaattcgcgg ccgcgtcgac aatatagcaa ggagagccaa agctatttct agttaattca 60
ttatgcataa tatagcaagg agagccaaag ctaagacctg cctcgag 107

```

<210> 1537

<211> 232

<212> DNA

<213> Homo sapiens

<400> 1537

```

gaattcgcgg ccgcgtcgac gctgctttct gctaagtctt gatccatctc ctcttggtctc 60
ttctccatat ctagtccacc ttctcttagg acatcactga agaggtcatt aattactttc 120
gaactattga tatcatcatc atccacactc atctcaattt cacgtatcac ttcaattttc 180
tgctcaacct ttgggtctga tgttactttt aaggatttgt cctcttctcg ag 232

```

<210> 1538

<211> 260

<212> DNA

<213> Homo sapiens

<400> 1538

```

gaattcgcgg ccgcgtcgac accatgatga aacgggcagc tgctgctgca gtgggaggag 60
ccctggcagt gggggctgtg cccgtggtgc tcagtgccat gggcttcact ggggcaggaa 120
tcgcccgcgc ctccatagca gccaaagatga tgccgcagc agccattgcc aacgggggtg 180
gtgtttctgc ggggagcctg gtggctactc tgcagtcctg gggggcagct ggactctcca 240
catcatccaa caccctcgag 260

```

<210> 1539

<211> 406

<212> DNA

<213> Homo sapiens

<400> 1539

```

gaattcgcgg ccgcgtcgac cctgaatatc cagaatgggtg tttctgaagt tcttctgcat 60
gagttttctc tgccacctgt gtcaaggcta cttcgatggc cccctctacc cagagatgtc 120
caatgggact ctgcaccact acttcgtgcc cgatggggac tatgaggaga acgatgacct 180
cgagaagtgc cagctgctct tcagggtgag tgaccacagg cgctgctccc agggggaggg 240
gagccagggt ggcagcctgc tgagcctcac cctgcgggag gagttcaccg tgctggggcg 300
ccagggtggag gatgctgggc gcgtgctgga gggcatcagc aaaagcatct cctacgacct 360
agacggggaa gagagctatg gcaagtacct gcggcgggag ctcgag 406

```

<210> 1540

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1540

```

gaattcgcgg ccgcgtcgac ggtatgagaa aaacaagggc aagtcactca agaccacaca 60
gtgactgagt ggtgctgaaa ttcaagcctg ggtctgtgag tccagaactc cagcttctca 120
ggtcacttcc tgatcgacc tggagctggg ctctgctgcc ctcatggag tgagcaccgg 180
cctgctttga tccaagctga gattcccgtg gggccctctc tcacagggtg ggtcctaca 240
gtgcagggtt tgctacttcc acaaaactcag ccaccactga gtgagcattc cctgtgtgtc 300
ctcaccggcc cctttcttgg ttttgggtgg caaagcttct tatctgtgtg tagcaagagc 360
agcctgtttg ggctactgtc cccaagagag tggggctgca cagcaaagta gggcatccgg 420
ttgtcctacc tcaggacagg tgaaaggcag acgggcttgt gagaaaggag gacactttgg 480
ccaaatctga catctatctg gccctcgct catttcgcca gtcctcggg ggtcagtcgc 540
ttagggtctt cacgtggatc tcacttccac gcctgectgc cacatcccca gcccgcgtaa 600

```

tcacggaaga acctcgag

618

<210> 1541

<211> 437

<212> DNA

<213> Homo sapiens

<400> 1541

```

gaattcgcg cgcgctcgac gagacaccca tccctacgcc agcttgaqcc gtgcactgca 60
gacacaatgc tgtatttctt ctcccagtc cctgatgagc cagcagtata gaccatatag 120
tttcttcact aaattgactg cagatgagct gtggaaaggc gctttagcag agactgggtg 180
tggagcaaaa aaaggaagag gcaaaagaac taaaaagaag aaaagaaagg atctgaacag 240
gggtcagatc attggtgaag ggcgttatgg ttttctatgg cccggactga atgtccctct 300
tatgaaaaat ggagcagtgc agaccattgc ccaaagaagc aaggaagagc aggagaaggt 360
ggaggcagac atgatccagc agagagaaga gtgggaccga aagaagaaga tgaaggttaa 420
acgggagctt cctcgag                                     437

```

<210> 1542

<211> 544

<212> DNA

<213> Homo sapiens

<400> 1542

```

gaattcgcg cgcgctcgac ctggaatcat gagcaacaat ggagcagacc taacctttgg 60
ttacatctcc tgtttttag tagtctcttt gtttggctca aattttgtgc cacttaaaaa 120
atttgatact ggtgatggaa tgtttctcca gtgggttctt tgtgctgccca tatggttgg 180
tgcttgggtt gtcaatctga tattacattg tccaaagttt tggccttttg caatgcttgg 240
gggctgcatt tgggcaacag ggaacattgc tgttgtccca attatcaaaa ccattgggtt 300
aggccttggg atcttaatct ggggatcatt taatgcctta actggctggg caagctcaag 360
gtttggctgg tttggattgg atgcagaaga agtatcaaat ccgctgctaa attacattgg 420
agctgggcta tcagtagtaa gtgctttcat atttttgttc atcaaaaagt aaataccaaa 480
taacacgtgt tccatggata ccactccatt aataacagag catgtgatca acacaaccct 540
cgag                                     544

```

<210> 1543

<211> 555

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (58)

<220>

<221> unsure

<222> (80)

<400> 1543

```

gaattcgcg cgcgctcgac agaaccacat ttttttggca cacacacaca cacatacnng 60
tgtatagata tatatatatn gtttataggc aagaaaacca acttttgaaa gaatatatct 120
ggctcaaaat ttataaggaa aaaacattac ggagtctctgt ttttttctga ttagtgtgtc 180
ggtctgaaag tagaagtggg tatggagaaa attgcagctg agattgcaca ggcagaggaa 240
caggcccgcg aaaggcagga ggaaggagg aaggaggccg cagagcaagc tgagcgagc 300
cagagcagca tcgttcctga ggaagaacaa gcagctaaca aaggcgagga gaagaaagac 360
gacgagaaca ttccgatgga gacagaggag acacaccttg aagaacaac agagagccaa 420
cagaatggtg aagaaggcac gtctactcct gaggacaagg agagtgggca ggaggggggc 480
gacagtatgg cagaggaagg aaccagtgat agtaacactg gctcggagag caacagtgca 540
acagtggagc tcgag                                     555

```

<210> 1544

<211> 457
 <212> DNA
 <213> Homo sapiens

<400> 1544
 gaattcggcc aaagagccta ggctactggg catagttaa aataaacatg ttcataattc 60
 tcaagattaa agtttatttc aatttccttg agtgtattat attttgcttt ttgtttgttt 120
 acattttgac tatctttctt gataaagatt cgctctccag ctttataatt tttttactga 180
 ggaaactcat tttgatggga ggtgttttgg tttagtctct tttccatcca cagatgtact 240
 cctcatcaga tgttttggaa gttccctcag tctggctctt ggagtcctatt tcagaagtag 300
 atattttgct ggacacctaa ggttcttgtc tcatagagat atttcacttc tgttccctaa 360
 atcaagaagg ttgtcctcca agtttttagt tacacagttg tctctgtttc ttcattaac 420
 gcctaaaccg tcgattgaat tctagacctg cctcgag 457

<210> 1545
 <211> 414
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (171)

<400> 1545
 gaattcgcgg ccgcgtcgac tcttgcaaaa atgtccttct cttgccagaa agaagggcat 60
 ttaaaaagtc aggcagggga ataggagatt attgttaatg ggtaccaaatt ttcagtttgg 120
 gaagggtgaaa gaattctgga aatgaatgtg atgattgcac aattaatgta nttaataacca 180
 ctgaaatgta tacttaaaag ttattaaaat ggtaaaattt atgtatattt caccacagtt 240
 gaaaaaaaaa agccaagtaa tacaagtaga agtaattgtt attaaacttt ttagttttatt 300
 tttaaattgt ttttacaaac tttggggatt ttagagatgt gttccttgag tttgattttt 360
 ttccctctgc atctctcaat ttagtttctt tcttttgcc aggaagagct cgag 414

<210> 1546
 <211> 547
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (71)

<220>
 <221> unsure
 <222> (241)

<400> 1546
 gaattcgcgg ccgcgtcgac ggcaagaagg aaagaccaag atcataaata ttaatgggtga 60
 aaacactgta ntaataaatt ttcatatgcc aaaaaaaaaa aaaaaaaatt ggggggaaat 120
 tttttgaaag ttaggagata aatacatctt ctgatatttg ataaacctg ctattggtaa 180
 gcttgacatt gtgctatggc aaaattctat gccgtaatga aacagctggt ccataacctt 240
 naaaaaataag aatgacacct aataataaca agtttaatca gtctaacttt tttttattgt 300
 tgcttattgg agagaccatt tatgggaaca ctaaacacat agacgtgtct aagttttttc 360
 ttagcttttt tctaactcat aagcatactt tacatagaga aaaccatacg aaattttta 420
 ttacagctca gtgaactgtt acaaggccaa tattaatgta tcgcccaccc aaataaaaaa 480
 aatgaacatg ggtaaacctg taatcaaaatt gcaattaaaa catcattccc tcccactcac 540
 actcgag 547

<210> 1547
 <211> 515
 <212> DNA

<213> Homo sapiens

<400> 1547

```
gaattcgcgg ccgcgtcgac tggctgcgag tacctccatg gtcccgggtgg ctgtgacggc 60
ggcagtggcg cctgtcctgt ccataaacag cgatttctca gatttgcggg aaattaaaaa 120
gcaactgctg cttattgcgg gccttacccg ggagcggggc ctactacaca gtagcaaatg 180
gtcggcggag ttggctttct ctctccctgc attgcctctg gccgagctgc aaccgcctcc 240
gcctattaca gaggaagatg cccaggatat ggatgcctat accctggcca aggcctactt 300
tgacgttaaa gagtatgatc gggcagcaca tttcctgcat ggctgcaata gcaagaaagc 360
ctattttctg tatatgtatt ccagatatct gtctggagaa aaaaagaagg acgatgaaac 420
agttgatagc ttaggcccc tggaaaaagg acaagtgaag aatgaggcgc ttagagaatt 480
gagagtggag ctacagcaaaa aacaccaagc tcgag 515
```

<210> 1548

<211> 643

<212> DNA

<213> Homo sapiens

<400> 1548

```
gaattcgcgg ccgcgtcgac ggtgatccac ccgccttggc ctcccaaagt gctgggatta 60
caggtgtgag ccaccatgcc cggcttgttt tttataagtt agcaaatatg atcttttctc 120
tggatgatag ccaacatagt tgtaatgaat aaaatgttac agaagacata acatatgaaa 180
agtattatag taactatttt atttcaatgt gatggactaa accacacact gcatttaggc 240
ataactttga gctgatgact tcctgtactg tccccaacca attgtcacc ctcagagggc 300
tgccacacta cctcttgggt ggcacaggaa ttgggtgggtc tgggctttta aaatcagatt 360
catctttctg aattccttcc tcagtttctt tcccatctgc ctgctcctg tgccccatcc 420
gggcattcca ggccaacccc caagtgtctg gccacggaag tgaatatgtt tgggatttaa 480
atcatcagtt gcctttgaaa gtcacgctgc aatagacaga taacttgga tgaggtgag 540
gcagagaatt cactgccatc aagtcgcagt gtaaataaga tcacagaggt gatgataacc 600
tttcacgggt tgatgatagg ttaatgaaaa aagaactctc gag 643
```

<210> 1549

<211> 588

<212> DNA

<213> Homo sapiens

<400> 1549

```
gaattcgcgg ccgcgtcgac gacctgcctc ggcctccttg cttccaagca cccttccgaa 60
gagtggccaa aaacaggcca gcatttttaa tactttggga atgggttggc caacatttga 120
aaaagctgca gcttagcaga tatgtccaca agctacatct tctaaagcct gacattgggt 180
aggaattaag gtcgggtcca ggtctcagta ttaataattc tttctcttta tcacctgaat 240
tttgctgtaa agcagtgtct accaatagaa acataatatg aattatata gtgattttca 300
acttcctagg caccactttt aaaaagttaa aagaaactgg gagaaataat tttatttaac 360
tcaatgtgat catttcaaat atgatctcag atatgatcat ttcaacatgc agtcaatgtt 420
ctaaattatt tacgagatac tttaccttct ttttttcaaa atctttaaaa tccagcatat 480
agtttacact tacagcatat cccagctgag accatccaca tctcaggggc tcaggaaata 540
cacaaggtaa gctgaacagc tcgcgtctca aggattagct gcctcgag 588
```

<210> 1550

<211> 744

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (238)

<400> 1550

```
gaattcgcgg ccgcgtcgac ggcattctat ttttcagggt agctatttcc tcttatttat 60
ggattattac aggtccttctt aaaagtattc aaatgatagt agaaaggcag atctgggcag 120
```

```

ggcacggtgg ctcatgcctg taatcccaac agtagattgg gaggttgagg tgagaggatc 180
gcttgaggcc aggagttcga gaccagcctc ggcaacatgg tgagacgctg tctctacnaa 240
gaaattttaa agattggctg ggtatgctgg tatgtgcctg tggctcagc tactcgggag 300
gctgagaggt gggagtagtg ctgagcccgg gaggtcaggg ctgcagtggg ccatgatcgc 360
gccactgcac tcccagccag aatcacatga gagcctgtct caagcaaca aacaaaaaat 420
gattcttgcc actgagctta agaaaagaaa aagggaaaaa aaggcagatc tgaattccct 480
ctagatccta ccttttcaag ggagaaaaga gaggacagag ccaagggcag aggaaaagct 540
tagggagaga aaatagcaaa aatgaaaaat ttacacttat ttcaaaagat agactttctg 600
ttttgaatct ttggaacatc tgttttgatc agactgaaaa tagttggacc acatgttttg 660
tgtttcaact gaacattcca gagagaagat tataattctg aagggtgctg ttcataaaga 720
ctgggtatttc ccatactctt cgag 744

```

<210> 1551

<211> 529

<212> DNA

<213> Homo sapiens

<400> 1551

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gaattcgcgg ccgcgtcgac ctggaatgca aacaacagaa aattatctta ctgagaaggg 60
aaatgaaaga aacgtgaaat ttccccaga acaccctgta gagaatgatg ttacacaaac 120
tgtaagttct ttctcattgc cagcctcttc aagatcaaaa aaattgtgtg atgttacaa 180
aggacttaaa atacacgtgt ccattccaaa tagaattccc aaaattgtaa aagaagggtga 240
agatgattac tacacagatg gagaggaaag cagtgatgat gggaagaaat accatgtgaa 300
gtccaagtcc gctaaacat ctactaacgt taaaaaaagc ataaggaaaa agtattgcaa 360
agttagctcc tcttcctcct cctctttatc ttcctcatct tcaggttcag gtacagattg 420
tttagatgca gggctctgata gccatctatc tgattcgtct ccgtcatcta agtcatctaa 480
gaaacatgta tctggtataa ccctcctgtc accaaaaacac aatctcgag 529

```

<210> 1552

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1552

```

gaattcgcgg ccgcgtcgac atgaaatgca gaatacacat ttttgatcc aggaagtgtt 60
acttacgtgc ctgtaacaat gtaatttttag gccagggtgca gtgggtcatg cctacgggtcc 120
tagcactttg gaaggttgag ggaggatgat cgcttaagtt cagttgttga aatgcagaat 180
acacattttt ggatccagga agtgttactt acgtgcctgt aacaatgtaa ttttaggcca 240
gggtgcagtgg ctcatgccta cagtccatgc actttggaag gttgaggggag gatgatcgct 300
taagttcagt tgttgaaatg cagaatacac atttttgat ccaggaaagtg ttacttacgt 360
gcctgtaaca atgtaatttt aggccagggtg cagtgggtca tgccacggt cctagcactt 420
tggaagggtg aactcgag 438

```

<210> 1553

<211> 710

<212> DNA

<213> Homo sapiens

<400> 1553

```

gaattcgcgg ccgcgtcgac atcacattgc agttaatata gaaatactgt ttatacttat 60
tcaaaattat agtaacacat cactgaattt attgaatgca acagagaagc acatatatat 120
atcgcgttta ctttttatga ctgttttaat agaattagtt ttcttgtaaa tcctgtgtat 180
atttaagaac agtattcaga gaagagggtta agaagcgtca tcctatagta aaagagatgt 240
aaggcataga gaaagtttgg aacttctttt gtaacagcga taatcccaag ctgttctaac 300
ctctcagtga gtttagaatg agtctctagg ttgtggatat taaggaaaaa ttgtttcata 360
taataaactg cttgatttta acttttaggc aaatttgttg actactgaga cagcgggttg 420
aagggtatcag attcactatg gaaactttta ggaaataggt tcccctagtg aaacttgta 480
aactaaataa agcccatgag aatctaacat gcctttcaga aaatattgtg tgaaagctat 540
ttgacacctt ttgatgcaca gtgtaggatt catattcttt tgactaatac tgggtgttga 600
ataccatttg ctctctgccg tgcacagaaa tttggagtag ggagtgaaaa caaagtattt 660

```

gctatgtttt ggtctggagg gacagaaaga aaaacaagct agctgccaaa

710

<210> 1554

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1554

gaattcgcgg ccgcgtcgac gattttacta tctttaagc aatgatggtc cagaaaaaca 60
ttgaaatgca gctgcaagcc attcgaataa ttcaagagag aaatgggtgta ttacctgact 120
gcttaaccga tggtctctgat gtggtcagtg accttgaaca cgaagagatg aaaatcctga 180
gggaagttct tagaaaaatca aaagaggaat atgaccagga agaagaaagg aagaggaaaa 240
aacagttatc agaggctaaa acagaagagc ccacagtgc ttcagtgaa gctgcaataa 300
tgaataattc ccaaggggat ggtgaacatt ttgcacacc accctcagaa gttaaaatgc 360
attttgctaa tcagtcaata gaacctttgg gaagaaaagt ggaaagggtct gaaacttcct 420
ccctcccaca aaaagacctg aagattcctg gcttagagca tgcgagcatt gaaggacca 480
tagcaaatc atcagtactt ggaacagaag aacttcggca acgagaacac tatctcaagc 540
agaagagaga taagttgatg tccatgagaa aggatatgag gactaaacag atacaaaata 600
tgagcagaa aggaaaaccc actggggagg tagaggaaat gacagagaaa ccagaaatga 660
cagcagagga actcgag 677

<210> 1555

<211> 536

<212> DNA

<213> Homo sapiens

<400> 1555

gaattcgcgg ccgcgtcgac attgggcatt tccagaatac cattcgagaa atgttttctc 60
agttcgcaga gtttgatgat gaactggata gcatggctcc agtggggaga gatgcagaaa 120
cattgcaaaa gcaaaaggaa actataaaag cctttctaaa gaaactagaa gccctcatag 180
caagcaatga caatgccaat aaaacctgca agatgatgtt agccacagaa gaaacctctc 240
ctgaccttgt tggaatcaaa agggacttgg aggccttaag caaacaatgc aacaagttac 300
tggaaccgagc ccaagccaga gaagagcagg ttgaaggagc aattaagcgc cttgaagaat 360
tttacagcaa attgaaagaa ttttctattc tgctccagaa agccgaagaa catgaagagt 420
cacaaggtcc tggttggtatg gaaacggaga caattaatca gcagcttaac atgttcaagg 480
tattccagaa agaagagatt gaaccttgc aaggtaaaca gcaagatata ctcgag 536

<210> 1556

<211> 575

<212> DNA

<213> Homo sapiens

<400> 1556

gaattcggcc aaagaggcct actattattc tcatggtcag tagcaacttt tggttcaaat 60
atcccaaac atgctcaaaa gtagaacatt ttgtttcaat attaggaaag tgctttgaat 120
ccccttgagc gacaaaagcg ttgtctgaga cagcatgcga agactcagag gaaaacaagc 180
agagaataac aggtgccagc actctaccaaa agcatgtttc taccagcagt gatgaaggga 240
gccccagtgc cagtacacca atgatcaata aaactggctt taaattttca gctgagaagc 300
ctgtgattga agttcccagc atgacaatcc tggataaaaa ggatggagag caggccaaag 360
ccctgtttga gaaagtggag aagttccgtg cccatgtgga agatagtgc ttgatctata 420
aactctatgt ggtccaaaca gttatcaaaa cagccaagtt catttttatt ctctgctata 480
cagcgaactt tgtcaacgca atcagctttg aacacgtctg caagcccaaa gttgagcatc 540
tgattgggtta tgaggatatt gagtgcaccc tcgag 575

<210> 1557

<211> 699

<212> DNA

<213> Homo sapiens

<220>

<221> unsure
<222> (7)

<220>
<221> unsure
<222> (9)

<220>
<221> unsure
<222> (40)

<220>
<221> unsure
<222> (59)

<220>
<221> unsure
<222> (89)

<220>
<221> unsure
<222> (105)

<400> 1557
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aatcatgcta ttaggattaa aaaacttcnc aagggcacgg tttcntttca tttccattca 120
gataccggtt ttctggggcac ggtaaaaaaa gaagccactt tttccaatcc taaaaccact 180
agcccaaata aaggcaaaga gaaggaggct gaggatggca ttattgctta tgatgactgt 240
ggggtgaaac tgactattgc ttttcaagcc aaggatgtgg aaggatctac ttctcctcaa 300
ataggagata aggttgaatt tagtattagt gacaaacaga ggcttggaca gcagggttga 360
acttgtgtgc gacttttagg tcgtaattct aactccaaga ggctcttggg ttatgtggca 420
actctgaagg ataattttgg atttattgaa acagccaatc atgataagga aatctttttc 480
cattacagtg agttctctgg tgatgttgat agcctggaac tgggggacat ggtcgagtat 540
agcttgtcca aaggcaaagg caacaaagtc agtgcagaaa aagtgaacaa aacacactca 600
gtgaatggca ttactgagga agctgatccc accattttact ctggcaaagt aattcgcccc 660
ctgaggagtg ttgatccaac acagactgag tacctcgag 699

<210> 1558
<211> 651
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (632)

<400> 1558
gaattcgcgg ccgcgtcgac ccgttaaaac acagcctata tcaatgaggg cctgggagaa 60
aactggggtg ggggaggact gtgcctctct tgaccttcat ttacaaaaaa taagttggct 120
cctagaccgg tgttggagcc acactgcccg ggacagccct gaagcagcca cgtccccacc 180
tttcaggagt cggccaagag cacggtggct gcagaaggcc ctggctgatg gagataacat 240
ttgacaaaca gggtagcgc cttccccctc cgtccctctt ttagaaaacc gccgttcttt 300
atggctttgc tcaggtagat cattcattgc cataaatttt cttatctcca gtgcttttcc 360
aattatgat aacaacagaa aagcagtcac tggtttctaa aaggtcatca agatataaag 420
cccgttttgg aagggaatga cttacgcagt gggcttgat aaatctggag aagttttatg 480
cacaagtcgg acaagaaatg taagttagat tcataaaata tataacgatt catggtgtct 540
cggctgatga aaattgtctt tccttttgct gtttgtgtgg gaattatttg ttctttccag 600
gtgttctaca tacggctcgg gagccagcaa gngcttatga agcccctcga g 651

<210> 1559

<211> 560

<212> DNA

<213> Homo sapiens

<400> 1559

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gaattcgcgg ccgcgtcgac cgagtggctg ggactgcagg cgcccgcac cgcgcccagc 60
tagttttttt tgtactttta gtagagacgg ggtttcaccg tggctctgat ctccctgacct 120
cgtggctcgc ccgcctcggc ctcccaaagt gccaattctg actctactta aacatcacct 180
gtatcagggg gctcattatt ccttgaggtc ttacatttct ttcagcacat tttgttccaa 240
gctacacatg actttaaaac agagccagcc tttggggcat atgttctctt tgggtgccaca 300
caaaaacctgt agtacatgat acagtgttgc ttccccctc cttttccttc catatatatt 360
tgttttgttt tgggcattgc attacttttt tgaattttta agaattctct aaattagtct 420
gaaggatggt ctgagggcca gacattagaa tttgtgagtt tttttgttgc tggttgtact 480
ttcctattta gaagacagac cgttctgaca gttgtgtgtg agcttcatgc cttccccagt 540
aactaacca tgaactcgag

```

<210> 1560

<211> 625

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (116)

<400> 1560

```

gaattcgcgg ccgcgtcgac ttgagatgag actctgtcgc caggctggag tgcagttgca 60
cgatctcacc tcaactgcaac ctccaccgcc cgcggtcaag cgattctcct gcctcngcag 120
cctcccgcca ccagctcag ctaatttttg tatttttagt agagacgggg tttcaccatg 180
ttggccaggg tggctctgat ctcttgacct catgatccac ccgcctcggc ctcccagagt 240
gctgagatta caggcgtgag ccaccgctcc tagcctataa tcatatttgt aataattgta 300
ctttgtgtag cactttacaa tggcgaagag ttttcagaaa taaccatatt taatcctcac 360
acagctatag agtaggtggc atatgacctg gatattctat caatttcagt ttcagatttt 420
ttgtcctgtc atccctttga gtgtccttcc agtttttgat ttgggaaata atgctacat 480
accggtggat ggggcaactt ttcccttctt tccatttgga cttgagcaga ctgagactca 540
agacttgatt tgatttatac tcaatgtggt agaagataag gaaccaagtc cagaacacac 600
attttcaaaa ctccgagctc tcgag

```

<210> 1561

<211> 667

<212> DNA

<213> Homo sapiens

<400> 1561

```

gaattcgcgg ccgcgtcgac tctagttgta ccaaagaagt ggtaatatag acttttgtgg 60
atccttttaga gcacctgata tcacattaaa taatatgata cctgaatatg tatttcagtt 120
gtttctccca ctagaatacc agggtaggaa ttttcttttg tttactgttg tatctgtagt 180
gtccagagca gtgcctagca tgcagtgaat gcttattaaa tattttttga atgaatgaat 240
tataagacac ttgggaagctg aggggaattta ttataaacag agtttaatcc ctgaaaggag 300
tcctgcacag agattgtcaa tcaaatcata gttttgaagt ctgtgttcta tgtctaagat 360
tgtattgagc ctttttaaat agaaactgga agataaacgt ggtccctact ctgattctaa 420
gagcttttat actaaaagga aagagaatgt catgagcatt tatgtatata gcaaggcatt 480
accatcaaca gccattaaaa ggggaggttt gtcaagggtg tcgtgagtca gttgagtatt 540
tggcctcttc acacgtgtga gaggctggag gctggtgggg agctcacata ggcgtaacag 600
cccatgttca aatccagctt cactgcttag tgtttgcatt acattggcaa gggttgactg 660
cctcgag

```

<210> 1562

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1562

```

gaattcgcgg cgcgctcgac gtcctgggccc tgcacgtaaa gctagccccc tgccccacgg 60
aaatggcaag cagtgcctcc ctccaggggt tctacatctg tgctccatct caaaatgcat 120
aaaagcctga gtcattcaga tgggagagac agtggttcta ctctctctta gttgggggttc 180
ctccagaagg agacctgag agaggacttg aggttatgta gtttatctga gtgaagatcc 240
cggaagtagg gagagaagga agctgacggg gaaggcgtgc attatcaagt aagttaccgt 300
catgtgcaca actggagctg aatcccactg gggaaccccg agagacagag ctgacacccc 360
agagttcacc cagcaaggcg gggagacagc tgggggtattt attcaccaag tctatcactt 420
atgaaaggct gtttctggaa acaattctctg actggccctg cacacacctg agcatacttc 480
ctaagccggg gatgtccctg agctgagaca ggcgttcctg acaagcagac ttcgagtggg 540
aggcaggcat cagaaccacc ctgtgagctg gttcagacaa agattgcagg cccttccacc 600
cccttgggcc cgccaagttc ctgactccct aggtctggag tggggcccgg gaatttgcat 660
ttcaaaaaat ctcgag                                     676

```

<210> 1563

<211> 573

<212> DNA

<213> Homo sapiens

<400> 1563

```

gaattcgcgg cgcgctcgac atgccctgat ctttttccag aagagattca cttaatccta 60
tgacagtgca gttcagacct gactggagta ctacaaatgt agtttgatct gtgcctggta 120
gataatttaa attgaccgac tccaaggtag ttatatgtta agtcagcatt tgccttcctt 180
tttgttcaca aataaaagca agagcctttt tactttccaa atgattttaa aatttagatt 240
gaatttgctc aaaggaagaa aaatatattt aatttttttt tctttttttg agacggggtc 300
tcactctgtt gcccagggtg gagtgcagtg gcatgatcat ggcttactgc agtcttgaac 360
tcctggactt aagcgattgc cccacctcag gcttgtcagt agctgggact acagggtgtgt 420
gtcaccacgc ctgactaact ttttaaaatt tttgtaaaga tggcatctct gttgcccatt 480
ctggtcctga actcctgggc tcaagcagtc ctctgcgtc agcctccaac acgctagggt 540
actatagggt tgaaccattg caccagactc gag                                     573

```

<210> 1564

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (21)

<220>

<221> unsure

<222> (26)

<220>

<221> unsure

<222> (57)

<400> 1564

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gaattcgcgg cgcgctcgac ntgtcnagga tgggtgtgggt gtcattgccg tgcaacnaca 60
ggaatcgca gaaagtacgg agcaaagcag gctctgagat actccgtagg aaaagttcca 120
ggttggcgg actggcgatc atctcctcca cagaggctct gtgcaaggca ggacctatga 180
caggcaccag gaaccatta tggatataat caaccaactg cttctgcacc agggggtgag 240
ccacctgaat tactgcattg cagaactcca gggaaactcat gaagagtgc aagggtggca 300
ctcccagcca gtcttcccg cgcagacagt gccaatcacc ccctgggaacc tcaatctttc 360
gaggcagtga tgagtacagg gcaactgagc ctgtggccag caccgggcag aagtaagagt 420
gatccgcgat gtacggggcc acagtggggc tcccagctga caaagccatg agaagaagta 480
gggcatcacg ggctgtctgg ccaggggtgc cctctcgatg cacaaggagg acaaggcag 540

```

aaaagagaag aagacgggga gcggtccag gctcaggagg tggctgcagg aagaactcga 600
g 601

<210> 1565
<211> 195
<212> DNA
<213> Homo sapiens

<400> 1565
gaattcgcgg ccgcgtcgac ggggatttta ttttaagttt gttggtttgt agttttctgt 60
atggtgattt tattttttta actgaaaatt taagaattaa ctccagataa taataacacc 120
ctcatttctt ataaactaac tacttgaatt taactttttg ccatgcccc ccaccgcat 180
caggcatcac tcgag 195

<210> 1566
<211> 293
<212> DNA
<213> Homo sapiens

<400> 1566
gaattcgcgg ccgcgtcgac cgagattact ggcaagtctt ttagattttt tacagccttt 60
ctcataacag cctctttctc ttttgcctct gttggtaacc cagtatgagc tattatgagt 120
tttattcttt gcctattgaa atagcttcca aaccaatgct tgattataat ttgtaccttc 180
tctgttcac cctattttct agattgttcc ttctaagtcc acatttaatc cattgtcttc 240
aagtctctct tcttttacag aatcaagttc agactttcgg gacttcactc gag 293

<210> 1567
<211> 715
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (145)

<220>
<221> unsure
<222> (226)..(227)

<400> 1567
gaattcgcgg ccgcgtcgac ccaagacact caatggaata tgtcacactc cttaataggg 60
acctgtgact ccttaataag gacctgtgac atgcccagca tcaagggata agaccgtaa 120
ttcacatata tgccatctgt cctcnagtgt tatctacata ggaaataaaa tgggaattgat 180
gtaaagtctc atttctgacc gctgacattt attaaacttt ggatcnnaga taatgtgatt 240
cttatgattg atttctcaaa cttagcttttc cctcccaagt ccaggacca ttaatttcct 300
gagccaatca gaaatatatt tttcaataat gctaaaatta gctacaattc tgctgacctt 360
actattaag aatctggatg ctggactcat tgacaagctt tccagaagca attttataac 420
agattttcatt ttaacaaaat actgatccaa ttttcattat tcttgagaaa tgtcagcttt 480
gccttaatga gtatttgctt taaatttcta agaatttata tcataactag agacccaaat 540
atctttcaca gaattttgtt ccataaatgt ttttcttaat tattaagaag tgttacctta 600
ttaaaatgac caccattcta aaccattttt cagtggctctg gatacgaagt ttacagtttc 660
ataccaacta tctaaaacct aattgcaaat tgaccacaga cccctaacc tcgag 715

<210> 1568
<211> 556
<212> DNA
<213> Homo sapiens

<220>
<221> unsure

<222> (21)

<220>

<221> unsure

<222> (57)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (116)

<220>

<221> unsure

<222> (185)

<220>

<221> unsure

<222> (188)

<220>

<221> unsure

<222> (278)

<220>

<221> unsure

<222> (281)

<220>

<221> unsure

<222> (312)

<220>

<221> unsure

<222> (327)

<220>

<221> unsure

<222> (434)

<220>

<221> unsure

<222> (438)

<220>

<221> unsure

<222> (462)

<400> 1568

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aggcngtata ctgccctgga cacagaggtg gccagtggc atcaagggct tgagantgga 120
gtgacagcct caggcgatgt ctgtctcgaa gctctcaggt tagaagaaaa ggaagtacgg 180
catcntanga ttttagaggc gaaatcgata ctgacttccc ccacggaaga gggcggggtg 240
ctgacactgc ctctgtgga tgggctgccg gggcgtentc natgcccccc tggggctgaa 300
agtggacctc anacaaagt ctgttcngag atttcttga ttgtgtctcc aaggcgaata 360
tcagtccagc tcgacagcca tcagcccaca cagagcatct cacagcctcc accacctcca 420
tcccttctgt ggtntgcngg gcaaggacag cctgggtcac anccgcecca ttctatttct 480
accgagtctc aaaccagcca cgaacactgt gtttcctctg cctttaaaaa cagctgaaac 540

atcccatctc ctcgag

556

<210> 1569

<211> 673

<212> DNA

<213> Homo sapiens

<400> 1569

```

gaattcgcg ccgcgtcgac gcatgagctt ggccaatgta ccccttgagg agcagcggtc 60
tcgcttcctg gctgtggggc ttgtggacaa cactgtcaga atcatctccc tggatccctc 120
agactgtttg caacctctaa gcatgcaggc tctcccagcc cagcctgagt ccttgtgtat 180
cgtggaaatg ggtgggactg agaagcagga tgagctgggt gagaggggct cgattggctt 240
cctatacctg aatattgggc tacagaacgg tgtgctgctg aggactgtct tggaccctgt 300
cactggggat ttgtctgata ctgcgactcg gtacctgggg tcccgtcctg tgaagctctt 360
ccgagtcgga atgcaaggcc aggaggcagt attggccatg tcaagccgct catggttgag 420
ctattcttac caatctcgct tccatctcac cccactgtct tacgagacac tggaaatttg 480
atcggggtttt gcctcggaac agtgtccga gggcattgtg gccatctcca ccaacacctt 540
acggattttg gcattagaga agctcgtgct tgtcttcaat caagtagcct tcccactgca 600
gtacacaccc aggaaatttg tcacccaccc tgagagtaac aacctatta tcattgaaac 660
ggaccctctc gag 673

```

<210> 1570

<211> 459

<212> DNA

<213> Homo sapiens

<400> 1570

```

gaattcggcc aaagaggcct acttgcatth attcagtaag actaattaac aaaagttgtg 60
agtaaacacc actagagggg aaaattaaag gccaggttcc caggcctaaa gcaaacacca 120
tttgtgggta ataaactgcg gacccccgag taggcggcag taaagtaccc tcagcaggac 180
aaaagttagt cttaaagccca tataactaaa caggttagta agataaactt cctacattcc 240
ttttcacttg caccctaate ttccctggcct cctgcaaaga gaccctggct gccttcagcc 300
aagcaatcaa gctatgcaaa ctctcaggcc ttttaggaca gcttttgact gttactcttt 360
taaatatttt tcccaccagc ctgattgaac cccaacaccc agctctgctg aggggtacagg 420
aattggccag acatggtggc acacacctct tagctcgag 459

```

<210> 1571

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (340)

<400> 1571

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gaattcgcg ccgcgtcgac aggtgagggg ggatgtgact ccagggggcc cagtactccg 60
agtcacagcc tcggatcgag acaaggggag caatgccgtg gtgcactata gcatcatgag 120
tggcaatgct cggggacagt tttatctgga tgcccagact ggagctctgg atgtgggtgag 180
ccctcttgac tatgagacga ccaaggagta caccctacgg gtgcgagcac aggatgggtg 240
ccgtccccca ctctctaatt tctctggcct ggtgacagta caggctcctg atatcaacga 300
caatgcccc atctttgtca gcaccccttt ccaggctacn gtccctggaga gcgtccctt 360
aggctacctg gttctccatg tccaggctat cgacgctgat gctggtgaca atgcccgcct 420
ggaataccgc cttgctgggg tgggacatga cttccccctt accatcaaca atggcacagg 480
ctggatctct gtggctgctg aactggaccg ggaggaagtt gatttctaca gctttgggg 540
agaagctcga g 551

```

<210> 1572

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1572

```

gaattcgcgg cgcgctcgac gcgactgagt cgggtggcgaa gacgggaacg cgacgatggc 60
ggagactctg cccgggtcgg gcgactcggg ccctggcacg gcttctctcg gcccgggcgt 120
tgcggagact gggacgaggg ggctcagcga gctgcgggtg atcgatctgc gggcggagct 180
gaagaagcgg aacctggaca cgggcggcaa caagagcgtc ctgatggagc ggctcaagaa 240
ggcggttaaa gaagaggggc aagatcctga tgaattggc atcgagttag aagccaccag 300
caagaagtca gccaaagat gatataaaag actgaagatg gaggaggaa gcacagaaga 360
taatggcctg gaagacgatt ccagagacgg gcaggaggac atggaagcaa gtctggagaa 420
cctgcagaat atgggcatga tggacatgag tgtgctagac gaaactgaag tggcgaatag 480
cagtgtcca gattttgggg aggatggcac ggacggcctt ctcgattcct tttgtgatag 540
taaagaatac gtggctgcac agctgagaca gctcccggt cagccccag agcatgtgt 600
aggtggatgg ggaaggattt aagaacactt tggaaacttc atcgttgaac ttcaaagtaa 660
ctccggacat tctcgag                                     677

```

<210> 1573

<211> 757

<212> DNA

<213> Homo sapiens

<400> 1573

```

gaattcggcc aaagaggcct aggtgaaatg aaatcatggt cacagtttta aaggaagagt 60
ttccagtatc aaaaccaggt ttgaatgtct taccacatt tcacagacac cagagtgct 120
atcagcacag tatgaacctc acagcccgta tctcgggtgt gtcttaattc acatctatga 180
tcccaaacct gtgttcaca ggatcatgcc cacacatggg tccataacaa ttatcccatc 240
tcctctgggg ctgagtctga gtccataaat ttccctcaac acagaagaca cggctgtcac 300
cagccctccc tctccaggtc agtggggact cagcgcaggt cgggtctcatg gtgaccagac 360
ggagcgcact gtgtacctg ccgcgtggtc tgcccattag aaacttcgta gagtgcctgt 420
gagccatgag gaagcctctg gggaaagcag tgccctggaa aatgccctcc actttccacc 480
tggacaccag gcaactgcgg gcacagggca gtcctgttg cccaagaaca accaaggagg 540
ctggcacacg agggaggagg gcattcttaag gccgaattgg ggtccaaaga ggcaaaactc 600
acagcggatg gccgagaagc tcccccaagc acaggcacca tcaggcagcc tcaaggccca 660
gagcggctct tcacgtgagc agaggggacc cccgcaagga cagggcagag gggtcgccct 720
cacctggaga gtcaacgact cccgcccacg gctcgag                                     757

```

<210> 1574

<211> 644

<212> DNA

<213> Homo sapiens

<400> 1574

```

gaattcggcc aaagaggcct acgccccggt cacagtgaat atgtagacgg ggtcgttgtc 60
cgtacgactg tgcgccaggg ctccggggagg ggcgccctcc gcgtgagcgc ccccttgga 120
atattgaaca taatcacctc tcattccaga ctatgttagg tcttaattgt gggaggacgc 180
ccgattgtct ggcctgttcc accccgagga ggaaggacac tgggtcatga cgccatcaga 240
gggcgccaga gcagggaccg gacgcgagtt ggagatgttg gactcgtgt tggccttggg 300
cggcctgtgt ctgcttcggg attccgtgga gtgggagggg cgcagtctct tgaaggcgt 360
tgtcaagaaa tctgcactgt gtggggagca agtgcatatc ctgggctgtg aagtgagcga 420
ggaagagtct cgtgaagggt ttgactctga tatcaacaat cggctgggtt accatgactt 480
cttcagagac cctctcaact ggtcaaaaac tgaggaggcc tttcctgggg ggccgctggg 540
agccttgaga gccatgtgca agaggacaga tctgttctct gtcaccattg ctctcgattc 600
actcagctgg ctgctacttc gccttcctcg caccaatact cgag                                     644

```

<210> 1575

<211> 184

<212> DNA

<213> Homo sapiens

<400> 1575

```

gaattcggcc aaagaggcct agaggggcta agggtagagt ttaattttaa tttccttctt 60
acaatcagag tcctcgccaa ggcaactgct tagttttcgt actgcacttg ggatcttaca 120
cattcattcc acaaatatcat attttatggc tactatgcat tgggcactat tccagggtgct 180
agag                                              184

```

<210> 1576

<211> 276

<212> DNA

<213> Homo sapiens

<400> 1576

```

gaattcggcc aaagaggcct acgtcgattg aattccagaa gccctgttca tggttgggga 60
tattttctcg actgcatgga atcagaaaga agcaaaagga tgggaaatgc ctgcattccc 120
ctgaaaagaa ttgcttattt cctatgtctc ttatctgcgc ttttctgac tgaggggaag 180
aaaccagcga agccaaaatg ccctgccgtg tgtacttgta ccaaagataa tgctttatgt 240
gagaatgcca gatccattcc acgcaccgat ctcgag                                              276

```

<210> 1577

<211> 823

<212> DNA

<213> Homo sapiens

<400> 1577

```

gaattcggcc aaagaggcct atgttatttg tctttttgat ttcgttgaca tttttatcga 60
ttgtgaaaaa gcatgggtgtt attcactgtg cacttgtaat aaaaatgtcg gtttcatttt 120
aaaatgccct tgacgttgca gtaaaaatta ttaattttat taaaatttta acccatgaat 180
acacatcttt tattctgaga tgaatgatac atatgcatag agtacttctg tggcatgcca 240
aagtaccatg cttgtttcag ggagatgtga agttcagtta caagctgaac tacttgcttg 300
tttcttgcaa taccattttt atttgcagta atgactgaca gacaaactac gccattttgc 360
actgcgttat ttgacagtgt ttttttgaaa agtgaatgag aaacatctcc catagtggagc 420
ttgatagctt cccagtatgt agacttttct catggagtct gatattagag agtgtaattt 480
tccaatctgt gataatgaaa tgtgtcaaca tttggaatat ttgtatacag tgggaaacca 540
atattttcca aatgatcaat gcatgatgtt tcaccagtat gcatgggtaa agttctttta 600
aagtataaaa tatatcagtt gatcttaatg taacagagtt tgagaagttc attggtaaga 660
tttcagatac cacattgtaa cctttaagaa attaccactt gtcaagtttt tgaatatgca 720
agcattttta aatattcttt ttccaactac atatttgtgt tgggtcagat gttttcacc 780
acttctgcta aaacaacatt ttataacacg tcgcggactc gag                                              823

```

<210> 1578

<211> 721

<212> DNA

<213> Homo sapiens

<400> 1578

```

gaattcggca aagaggccta tccaccatca cgatcgtggc cgaggaggta tcaggcacia 60
acgactatgt gcaactcacc ttcagagcct acaagctgga caacaaggat ctgttcagca 120
agtctgaccc tttcatggaa atctataaga ccaacgagga ccaaagtgat cagctggtct 180
ggagaactga ggtggtgaag aacaacctga accccagctg ggagccgttc cgcctgtccc 240
tgcattccct atgcagctgt gatgttcacc gacctctcaa gtctctgggt tatgactatg 300
actccagtgg gaagcatgac ttcatcggcg agttcaccag cactttccag gagatgcagg 360
aagggacggc aaacctggg caggagatgc agtgggactg tatcaacccc aagtatcggg 420
acaagaagaa gaattacaag agctcaggga cggtagtgct ggcccagtgc acggtgagg 480
aggtgcacac cttctcggat tacatcatgg gtggctgcca gatcagcttc acggtgggca 540
ttgacttcac tgctcccaat ggggacccga ggagcagcca gtccctgcac tgctcagtc 600
ccgacagcc caaccactac ctgcaggccc tgcgtgcagt gggaggcatc tgccaggact 660
atgacagtga taagcgggtc ccagcttttg gctttggggc tcgaatcccc cccaactcga 720
g                                              721

```

<210> 1579

<211> 549

<212> DNA

<213> Homo sapiens

<400> 1579

```

gaattcggcc aaagaggcct accagatggt aactcagatc cacagaaaaa aataaaaagc 60
accagaaatg gcaaatatgt ggacaaatgt aaaatctctc tattttctct tcttatttat 120
ttaaaataca tagaactatt tagaaaaagt ataacactta tgtattggac ttatatattg 180
attatatata catggcaata gtcagaagg tggggtgggg tgggggaatt tattggagtt 240
atattgctgc aagttttacca tattttacct gaaacaactt agattattac ccctaagtgg 300
actgcaatga gatattatgt gtaatccac taaaatataa tgtgagagga ttgcctgagg 360
ccaggagttt gagactagcc taggcaacat agtgagaacc tgcgctaca aataataata 420
ataataatca aagctctcac ctcaataacc taggaaaaaa atagcaaaat aaatccaaag 480
caagcagaag gaaggaaata ataaagataa gaacagaaat ccatgaaatt agaaaccgaa 540
aaactcgag                                     549

```

<210> 1580

<211> 646

<212> DNA

<213> Homo sapiens

<400> 1580

```

gaattcggcc aaagaggcct aatactctga aattaccctt tatctaataa tagcattaag 60
cacagtgtct tttatatttc ttttgacaat catcattttg agcatcatca agtgctaccg 120
ctacactgcy tatggcactg catgctgttg aggcttctgt ggagtaaggg aaagggtcccc 180
tgcagaactg tacaacaacg ccaacaacaa tattgatgcc aggataccgc atggcctcaa 240
agtgagcct cacttcattg aagtctgagg gaatggctcc ctcaccaaga cctactgcta 300
caaggcctgt ctgacagcag gctcagggag tgacactttc atgttttaca atacaggggc 360
ccagacagga ccagggcctt cgggagccca agcagcagtg actgacagca ggaatctcac 420
aggccaaagt ggtcagaatg ctgggaacct gattattctc aaaaatgagg ctgtttctca 480
aaatgagcca cgacagccca accctgactg gcgttactct gcctccctga gagcaggcat 540
gcacagctct gtgcacctag aggaggctg cattctacgg gctggtccag gagggcctga 600
tcagcagtg ccaacagtat ccagtgaac accagaacgc ctcgag                                     646

```

<210> 1581

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1581

```

gaattcggcc aaagaggcct aagagaactc cagatttgcc tgaagaagag tatgtgaagg 60
aagaaatcca ggagaatgaa gaagcagtc aaaagatgct tgtggaagcc acccgggagt 120
ttgaggaggt tgtggtggat gagagccctc ctgattttga aatacatata actatgtgtg 180
atgatgatcc acccacacct gaggaagact cagaaacaca gcctgatgag gaggaagaag 240
aagaagaaga aaaagtttct caaccagagg tgggagctgc cattaagatc attcggcagt 300
taatggagaa gttaacttg gatctatcaa cagttacaca ggccttccta aaaaatagtg 360
gtgagctgga ggctacttcc gccttcttag cgtctggtca gagagctgat ggatatccca 420
tttggtcccg acaagatgac atagatttgc aaaaagatga tgaggatacc agagaggcat 480
tggtcaaaaa atttgggtgct cagaatgttg ctcgag                                     516

```

<210> 1582

<211> 684

<212> DNA

<213> Homo sapiens

<400> 1582

```

gaattcggcc aaagaggcct actcctgcct cggcctcccg agtagctggg actacaggca 60
ccggacacca cgcccggtta attttttttg tatttttagt agaggcgggg ttccaccgtg 120
ttagccagga tagtctcaat ttcctgatct cgtgatctgc ccgccttggc ctcccaaagt 180
gctgggatta taggcgtgag ccaccacgcc cggcctctat ttttgaaagt taccttttgt 240
cattttttta tctgcagtag tgtggattag aaacctggct cagtcctacc actaaaataa 300

```

```

ttctttaaag ttggatgaaa cattaaaaaa atctttgcttt agtgtcacaa tgatcaggca 360
agaagacaat aatttttatga aaatttaagg tttaccttga gagcattctc tggctttgat 420
aaggatgagg ccatgtttct tgggactgta aaaagcaggg gaccagagac aaagtccaaa 480
gtccagccaa attggaagtg tagtaagaga acactcttac actattggtg ggagtgtaaa 540
ttagttcaac cattgtggaa gacagtatgg tgattcctca aggatctaga actagaaata 600
ccatttgagc cagcaatctt attactgggt atatactcaa aggattataa attattctac 660
tctaaagaca caggcactct cgag 684

```

<210> 1583

<211> 464

<212> DNA

<213> Homo sapiens

<400> 1583

```

gaattcggcc aaagaggcct agcttctacc aaatttaacg cagcttaatt agggaccagg 60
tacatatttt cttctgaaca tttttggtca agcatgtcta accataaaag caaatggaat 120
tttaagaggt agattttttt ttccatgatg cattttgtta ataaatgtgt caagaaaata 180
aaaacaagca ctgagtggtg tctcttgaag tataaggggc taatgaaaaa taaaagatag 240
atatttggtta tagcttgaca ttttaacagt catagtatta gacgtttcgt gaccagtgc 300
ttttggactc tctcaggatc aaaatacgag tctgccaact gtattaaatc ctctccacc 360
ccctccacca gttggtccac agcttctctg tgggtcgttg tcatcaaatc cattgggccc 420
aaatgaacat gaagcagatg cagcttgagg ggcccgggct cgag 464

```

<210> 1584

<211> 660

<212> DNA

<213> Homo sapiens

<400> 1584

```

gaattcggcc aaagaggcct acaagaggcc ctaggaaatcc tgttcttgtg caaatcctgt 60
ggttgatgct caacacacaa aaccaaaaaa ctgtttgttc ttggcataaa aatgaaatga 120
actcttgctt atttctttat aaagaatgaa gtttttagatc taaaggaatt tggatacact 180
ttatttcctt tgtttttttt ccagtttggg ttctgacctg tgttgggtgg gggggttagg 240
tatgcagtga gccagagcag ttgactgtag gtgtattctg attttttagcc tctcaagagg 300
actgtcataa caggatagcc atgattccaa taacactggg aggtggatga aacattctga 360
ggatagctgc aggttgtaga tgggcttgct tactttggag ctggttggtt ggggtgggtt 420
cctcaggggg tagtgagaag ggaggaaaaa cgatgagatg taagtcagat taaaagatgc 480
ctgcatcagc atgagaagcc tactgctaag ggtcaatcat catacaggat gtattttcaa 540
tattaagcag atatggtaga gatttcaatc attgttgac tgattggcct tagagctctg 600
gtaaaacgct gcacagagc agagcagaca cctgctgagg tcccagggtc agagctcgag 660

```

<210> 1585

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1585

```

gaattcgcgg ccgcgtcgac acagaaagtt atagagatta tattgtgatg ctggaacttg 60
gagtgagaca cacatcattt ggcatttgag ttgaatggta attcacagta atgctgccgt 120
tggtcgggac ttaaagacac ttgacctgtt tgggctgttg ccacttaaaa gttcatgacc 180
acaaatgtcc acagtgtctt cctctgagga aactcgaatc ctgaaatgga aattctttgt 240
ggcagataac tggcttatga caccttgaaa agttcaagtg ctcatataac acaccacact 300
gaacccctt tccacagca atatgttcac tatgttacca atttgcaact tgtgcttcaa 360
tagtggaatc tactttcatt gttacactg atctcgag 398

```

<210> 1586

<211> 652

<212> DNA

<213> Homo sapiens

```

<400> 1586
gaattcggcc aaagaggcct actgttaatg gcgggcagta gccgctgagg ggattgcaga 60
taaccgcttc ccgcacgggg aaagtctacc ctgcctgcca ctttctgctc gccgtcagcg 120
ccggagctcg ccagcatgtc tgttggtaccg cccaatcgct cgcagaccgg ctggccccgg 180
ggggtcactc agttcggcaa caagtacatc cagcagacga agccccctac cctggagcgc 240
accatcaacc tgtaccctct taccaattat acttttggta caaaagagcc cctctacgag 300
aaggacagct ctgttcgagc cagatttcag cgcattgaggg aagaatttga taaaattgga 360
atgaggagga ctgtagaagg ggttctgatt gtacatgagc accggctacc ccatgtgtta 420
ctgctgcagc tgggaacaac tttcttcaaa ctacctgggt gtgaacttaa ccaggagaa 480
gatgaagtgg aaggactaaa acgcttaatg acagagatac tgggtcgtca ggatggagtt 540
ttgcaagact gggctattga cgattgcatt ggtaactggg ggagaccaa ttttgaacct 600
cctcagatc catatattcc tgcacatatt acaaagccta aggaaactcg ag 652

```

<210> 1587

<211> 745

<212> DNA

<213> Homo sapiens

```

<400> 1587
gaattcggcc aaagaggcct attcagagtg ggatatcaga tctttagtgt gaagatacat 60
ctacattaaa ccaggaatca ctagaactga catttggaca agaaaatttg gaaaatttta 120
aaactgtgaa ggttgatcat ggaattaaa gaggaagggg catcagaaga agggcagcac 180
tttcttccca cagcccaggc caatgatccc ggggactgtc agttcacaaq tatccagaag 240
actccaaaat gaaccgcagt tggaattcat ccttgcatgc aaggatctcg tggctcctgt 300
ccgtgatcgt aaactgaata cactgggtgca gatctccgta atccaccccg tggagcagag 360
tctgaagaaga tactccagca ccgaaattgt ggagggaaca agggacccac tgtttttgac 420
tgggtgtcaca ttcccatctg agtatcccat ctatgaggag accaaaataa aactaacagt 480
ctatgatgtc aaggataagt ctcatgatac cgttcgaacc agtgtcctac cagaacataa 540
ggatcccccg ccagaagttg ggcaagttt cttgggctat gccagtttta aagtgggaga 600
gctgctgaag tcaaaaggagc aattgctggg cctgagcctg agaacttcag atgggtggcaa 660
agtggttggc accatagaag tcagtgtcgt gaagatgggg gagattgagg atgggggaagc 720
cgaccacatc accacagatc tcgag 745

```

<210> 1588

<211> 129

<212> DNA

<213> Homo sapiens

```

<400> 1588
gaattcggcc aaagaggcct aggcaaacag aagtaattta tgattatgat gctagctaca 60
tatatatcc ctctctggca aaaactatct gtccacaca tgatcctaag tgtacacgca 120
tttctcgag 129

```

<210> 1589

<211> 571

<212> DNA

<213> Homo sapiens

```

<400> 1589
gaattcggcc aaagaggcct agaccaaact gcatcaattg ttggagaatc aaaagaactc 60
ttctgtaccc ctggcagagc atttgcagat taaagaagca tttagaaaag aagttggaat 120
cataaaagcc agcttgagag aaaaggaaga agaaagccaa aacaaaatgg aagaagtctc 180
caaacttcag tcggagggttc agaatactaa acaagcatta aaaaaattag agactagaga 240
ggtagttgac ttgtctaaat ataaagcaac aaaaagtgat ttggagacac agatttctag 300
cttaaatgaa aaattggcca atctgaatag aaagtatgag gaagtatgtg aggaagtttt 360
gcatgccaaa aagaaggaaa tatctgcaaa agatgagaag gaattactgc atttcagcat 420
tgagcaagaa attaaggatc agaaggacg atgtgataag tccttaacaa caatcacaga 480
gttacaaga agaatacaag aatctgctaa acaaatagaa gcaaaagata ataagataac 540
tgaactgctt aatgatgtgg aaagactcga g 571

```

<210> 1590
 <211> 490
 <212> DNA
 <213> Homo sapiens

<400> 1590
 gaattcggcc aaagaggcct acctcacgcc atgccccagc tcatggctta catcccatg 60
 ccaggcagag ctggaacggg agcgggcaca gctgctggtc cgggccacga tggctgaaga 120
 gcaactttct gagctacagg agtacgtgga ccagcacctg ggcagggtggg cagagggagc 180
 tgggtgtgac cccaggggccc tggctctggtt ggaatgaagg atgatggctg cctcaggcgc 240
 taaaagcaga cctgtccaca gctgggcaag tcaactaagc atggttcctc tgagcaggta 300
 caagcacgaa atcctgaggc tgaggaagct ggcagggtgca ggggacccct ggaagtgagg 360
 ggctgtgcct ccagccaagc cccagcatcc aaggaccggc agccactagg ccgtctccca 420
 aggagcagag cagagcagag ctctcagcc agcacagaac cctccccacc agccccccat 480
 aaaactcgag 490

<210> 1591
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 1591
 gaattcggcc aaagaggcct acagtttcta ttagtgacc attttactcc tgactctctt 60
 gacatcagat ggggtattcg atatttataa caaactgcag ttccaacaat attttctttg 120
 cctgaagaca atcagggaag agacccttct aaaaaaaat cccagaagaa aaacttgga 180
 gatgagaaag aagtatgccc aaaagccaag tcagaagaat catttgtatt aaatgagaca 240
 aagaaaaata tagttaacac agatgtgccc catcaacatc cagaattact tcattcatct 300
 tccttggtta agccaccagc tcccaaaaca ggaagtatac aaaataacat gttaactctt 360
 aatctagtta aacaacatac tgggaaacca gaatctacct tggaaacatc agttaacca 420
 gatacaggta gaggtggttt tcacacatgt tttgagaatc taaattctac aactattact 480
 ttgacaactt caaattcaga aagtattcat caatcttttg aaactcaaga agttcttgaa 540
 gtaactacca gtcactctgc ttgctcgag 569

<210> 1592
 <211> 575
 <212> DNA
 <213> Homo sapiens

<400> 1592
 gaattcggcc aaagaggcct aggtgtatca agtaagggtg ctctgctctg ttcacgcca 60
 actaggggaa gcgaatgagg agtttgact ccgtgtacaa cagctggtgg ccaaggaatt 120
 gggccagaca gggacacggc tcaactccagc tgacaaagca gagcacatga agcgacaaag 180
 acaccccaga ttgcgcccc agtcagccca gtcttcttcc cctccctccc ctggctcctc 240
 tcctgatgtg caactggcaa ctctggctca gagagtcaag gaagttttgc cccatgtgcc 300
 attgggtgtc atccagagag acctggccaa gactggctgt gtagacttga ctatcactaa 360
 tctgcttgag ggggcccgtg ctttcatgcc tgaagacatc accaaggga ctcagtcctc 420
 acccacagcc tctgcctcca agtttcccag ctctggcccgt gtgacccctc agccaacagc 480
 cctaacattt gccaaagtct cctgggcccgt gcaggagagc ctgcaggagc gcaagcaagc 540
 actatatgaa tacgcaagaa ggagattcac tcgag 575

<210> 1593
 <211> 213
 <212> DNA
 <213> Homo sapiens

<400> 1593
 gaattcggcc aaagaggcct aaaatactcc acctccttga gatcttcttt gatttgactc 60
 tgactcttca tgtcagccac cactgggtta gttcaggccc ttatcgatc ttatttgat 120
 tattgtaata atttcctaac cagggtcctt ttttccatc ttgtttcttg ctgtagtggt 180
 cattgctacc agaaagatac tgctatactc gag 213

<210> 1594

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1594

```
gaattcggcc aaagaggcct agtcaacagc atttcttggt ccaagatcac ccttctgagt 60
acctctctgg ctgccaaatt gccaggcct tcacagtttg attccatttc tcagctccaa 120
gcattaggta aaccaccaa gcaatcctag cctgtgatgg cgtttgacgt cagctgcttc 180
ttttgggtgg tgctgttttc tgccggctgt aaagtcata cctcctggga tcagatgtgc 240
attgagaaaag aagccaacaa aacatataac tgtgaaaact taggtctcag tgaaatccct 300
gacactctac caaacacaac agaatttttg gaattcagct ttaatttttt gcctacaatt 360
cacaatagaa ccttcagcag actcatgaat cttacctttt tggatttaac taggtgccag 420
attaactgga tacatgaaga cacttttcaa agccatcacc aattaagcac acttgtgtta 480
actggaaatc cctgatatt catggcagaa acatcgctta atgggcccaa gtcactgaag 540
catcttttct taatccaaac gggaatatcc aatctcgag 579
```

<210> 1595

<211> 111

<212> DNA

<213> Homo sapiens

<400> 1595

```
gaattcggcc aaagaggcct atatacactt tagtattatt gagtaaata gacagtgttc 60
agtttgattt ttattctgat gtgttttaaa aaattcaggg tactactcga g 111
```

<210> 1596

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1596

```
gaattcggcc aaagaggcct atttttttgt gtttttagtg gagacggggt ttcactgtgt 60
tgccaggat ggtcttgatc tcctgacctc gtgatacacc tgccttggcc tcccaaagt 120
gtaggattgc aggcgtgtgc caccacaccc ggcccagtaa ttctaatttt gccctttgcc 180
ttgtgatctt tgctttgacc tttgccttgt gatctttatt gcccttttaa gcatgtgatc 240
tttgtgacct actccctggt catacacccc ctcccctttt aaagtcctta ataaaaacct 300
gctggttttg tggctcaggg gacatcatgg acctaccgat atgtgaggtc acccccagag 360
gcccagctgt aaaattcctc ctttgtactc tttctcttta tttctcagac tggccgacag 420
ttagggaaaa tagaaaggac ctatgttgaa atattggggg ctgggtcccc cgataaaaaat 480
gtaaaaacagg acatttttac taagaaatat aaatatcttt tgtttctctg aaataagaag 540
tcaaaagtat ttaagcttca actcatagtc attaatgtct tagaattgta tcttatttag 600
agataattta gatattcaat gaatatccat cctttaattt agcatagcaa attttgaggg 660
tatagttaac aaaaagattt taaaaacctt taaaaatgtt tgtattagtc aggtatctcg 720
ag 722
```

<210> 1597

<211> 601

<212> DNA

<213> Homo sapiens

<400> 1597

```
gaattcggcc aaagaggcct agtgctactt cgtgatcacc ctcaaccaca tggctctctgc 60
ctccatgate acgctctctgc ttcccatcct catcttctctc tgggccatgt tgcctctccc 120
caggccagc cgcgggttct ggatgatggc catcgtctat actgaggtgg caattgtagt 180
caagtatttc ttccaatttg ggttctttcc ctggaataag aatgtggagg tgaacaaaga 240
taaaccgtat cccccccaa acatcatagg agtggaaaag aaggaagggt atgttctcta 300
tgacctcacc cagctcctgg ctctgttctt tcacgatca attttgaagt gccatggctt 360
atgggatgaa gatgacatga ctgaaagtgg catggccagg gaggaatcag atgatgagct 420
ctccctcggg catggcagga gggactcctc cgattctctc aagtcacatc acctggccgc 480
```


gtctgtggag tcagtgcattg tgaccttccc ggagcagcag acagctgtcc ggaggaagcg 540
 ctccggcagc agctccgagc catcccagag atccagcttt tcttcaaaca gatacctcga 600
 g 601

<210> 1598

<211> 492

<212> DNA

<213> Homo sapiens

<400> 1598

gaattcgcgg cgcgctcgac ctaagaagtc cagatactaa gagcaaagat gtttcaaact 60
 gggggcctca ttgtcttcta cgggctgtta gcccagacca tggcccagtt tggaggcctg 120
 cccgtgcccc tggaccagac cctgcccttg aatgtgaatc cagcccctgcc cttgagtccc 180
 acaggtcttg caggaaagctt gacaaatgcc ctacagcaatg gcctgtgtgc tgggggcctg 240
 ttgggcattc tggaaaacct tccgctcctg gacatcctga agcctggagg aggtacttct 300
 ggtggcctcc ttgggggact gcttggaaaa gtgacgtcag tgattcctgg cctgaacaac 360
 atcattgaca taaagggtcac tgacccccag ctgctggaac ttggccttgt gcagagccct 420
 gatggccacc gtctctatgt caccatccct ctgcgcataa agctccaagt gaatacgcct 480
 ctggtactcg ag 492

<210> 1599

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1599

gaattcggcc aaagaggcct atttttttta agaactctaa agtttcccca agagcttggg 60
 gtctttttga cttacacttt tgtaattaat gtatagtttt attacagtgt gatcacagaa 120
 tatggccaat ttcttttgga aagaaattac ttacaatttt tttttggtag cctaataataa 180
 aatcaagttt tgcaaaacttt tcttatattt tttttttaat gggctagaca gaagatcctt 240
 ctctttaatt attcatttat tcatcgagga ttgtttccac catgtgtctc atacatgcca 300
 ggcatgtgat taggcattgc aggatataaa ataagtcata agctttgtct tagatttgta 360
 aagtttggat ggaacacaga cacatgtaga cctaattata atacagaaag aaatgcaacc 420
 gcggctcgag 430

<210> 1600

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1600

gaattcggcc aaagaggcct aggtataact caaacttttt gtggacattc ttttcaaaat 60
 tttttaagaa ccctgtacta taaaagggtg agtaaaaaaca ggaaagcgtg ctataagttc 120
 aaatctgttg tattacccta aattagataa accaacctga attatagtag atttctcaat 180
 agatgaggaa ctgaaaaata ctatgtaaaa tatcttccaa aatgcttttt atactttttt 240
 tatttgtaat ttgttctatc taaaatgttc gttagcttaa cctaattggc gttattggat 300
 tcatatgact aacgtttcct cagtattgta atgcttgaaa tatttgaaag aaaaaatggt 360
 gtttttttagt tgaaactggt atatataact ctgtgctcga g 401

<210> 1601

<211> 524

<212> DNA

<213> Homo sapiens

<400> 1601

gaattcggcc aaagaggcct atatgaatac tgcctcagcg tccatctgct tgtcctgttc 60
 ccagcttgct atgcttgact aacatatttt gaggcagtct tcacgcagct cctgttttca 120
 tgttctgggt agataagacc ccataacctg agctgcttga ccacattact tctgctttaa 180
 gcctcgggaa cctgataagg taacccccga gtccctgtgc tgagtctcgt gcttccttca 240
 aatgaactaa tccaaccgtg ctgtgggaaa cccacctagg taaccccata aaggatccaa 300

```

ccccacaggcc cctccgtttc tcgttcccca cctgctgggtc gaaggagcag gtcctggatg 360
gctcctcccc tcttctcttt ggtcttgcca ggggtgctgt cctcttccct ccagacctgt 420
gagtagtaaa cttgattcat ttgagctct gagtgtccct cactgtgctg cacctgactg 480
caccaagccc taaaccgtcg attgaattct agacctgcct cgag 524

```

<210> 1602

<211> 496

<212> DNA

<213> Homo sapiens

<400> 1602

```

gaattcggcc aaagaggcct aggtcagcat gctgctcctc tgtcacgctc tcgctatagc 60
tgttgtccag atcgttatct tctcagaaaag ctgggcatatt gccagaaca tcaacttcta 120
taatgtgagg cctcctctcg accctacacc atttccaaat agcttcaagt gctttacttg 180
tgaaaacgca ggggataatt ataactgcaa tcgatgggca gaagacaaat ggtgtccaca 240
aaatacacag tactgtttga cagttcatca cttcaccagc cacggaagaa gcacatccat 300
caccaaaaag tgtgcctcca gaagtgaatg tcattttgtc ggttgccacc acagccgaga 360
ttctgaacat acggagtgtg ggtcttgctg tgaaggaatg atctgcaatg tagaattacc 420
caccaatcac actaatgcag tgtttgccgt aatgcacgct cagagaacat ctggcagcag 480
tgcccccca ctcgag 496

```

<210> 1603

<211> 350

<212> DNA

<213> Gallus sp.

<400> 1603

```

gaattcggcc aaagaggcct acatcttctt aatatcagaa acaattctga ctgaggtttt 60
gactgatctt cattttcatg acagtgggat tttttctccc aacaatgaaa aggaagaacc 120
ttttcctaag cctattgtct tgctacagtt tgctcagagc tgccagttct cacctcataa 180
tcgaggagaa gacagaatgc aacctttcaa agagcaacaa aatgaacctc ccagatctcc 240
cacccatctc cattgtagat ttaactaaaa gatcccagaa agtcagcaga aaagaggcag 300
agaataagaa atcttccaag aaaaatgctg aactgaaggc acgtctcgag 350

```

<210> 1604

<211> 276

<212> DNA

<213> Gallus sp.

<400> 1604

```

gaattcggcc aaagaggcct aaaaacattg ctccaaaaaa ttactgaagc atctaaagga 60
tttcagatgg aaaaaataga agacgggtat gaaaatatga accaattcac agtgaacctc 120
agtagagaag aaaagataat acgagaaatt gattttgaca gagaggagga ggcagaagag 180
gaagaggagg agacagtaga aggggaagat ctggatgaag ttcacacgga gtcacgggga 240
gaggaggggg aggaagaaga gaaggagggc ctcgag 276

```

<210> 1605

<211> 272

<212> DNA

<213> Gallus sp.

<400> 1605

```

gaattcggcc aaagaggcct acgtcgattg aattctagac ctgcctctat tttctcttcc 60
tgtgttttat ggtcttccaa gtgttcagaa acatcagtgg aaagcagtc agcctgccag 120
cgtagagcaa ggcccgcgc ctgcattacg aggggctgat ctttcggttc aagttcctga 180
tgctcatcac cctggcttgt gcagccatga cagtcatttt cttcatcggt agccagggtga 240
cagaaggcca ctggaagtgg ggcgtctcgt ag 272

```

<210> 1606

<211> 249

<212> DNA

<213> Gallus sp.

<400> 1606

```

gaattcggcc aaagaggcct aatctagatc tgctctcaga tgctccctcc ctccctgttc 60
tggatggccc ttatcctatt tccacctgag gtcaatggca cttccctaaa taagtttccc 120
aaagaaacaa caaaatgcaa caccaccctt gacaaaaagc cacacgatgc tacttttttt 180
gctcgtcgtg tgacgactg cagcccatgc agaaatgcc a gattccctc ttccaacccc 240
ccactcgag                                     249

```

<210> 1607

<211> 107

<212> DNA

<213> Mus musculus

<400> 1607

```

gaattcggcc aaagaggcct acaaaataac tagcaaccat gaagtgggtg gaatcaattt 60
ttttaatttt cttactaaat ttactgaat ccagaacaca actcgag 107

```

<210> 1608

<211> 416

<212> DNA

<213> Mus musculus

<400> 1608

```

gaattcggcc aaagaggcct acactttctt ctgctgatag tagacctgct gaagaccttt 60
ggaccagccg ctgagccacc atgatctcta ggctcctttc cttctcttgc ctccggctgt 120
gtgttgggca aacagacatt cctgaaaatg ggtctcctcc caagcccagc ctcagtgcct 180
ggcccagcac agtgcttccc accaagagcc acgtgacaat gcaatgtaag agccccaccc 240
cgagtaaata cttcatcctc aaaaaggaag gtttcgcttt gaattctgtg aagccatata 300
atttgacaga ggagacggct gatattcatt tcaccgacct acgacagaat gatggcggac 360
actacacctg tgaatactat agcaaatggc cccatgacac accgtcacac cccagc 416

```

<210> 1609

<211> 121

<212> DNA

<213> Mus musculus

<400> 1609

```

gaattcggcc aaagaggcct aggtttcttg gagcttcac aaacttaaaa ccatgaaaca 60
tctattattg ctactattgt gtgtttttct agttaagtcc caaggtgtca acgttctcga 120
g                                     121

```

<210> 1610

<211> 205

<212> DNA

<213> Mus musculus

<400> 1610

```

gaattcggcc aaagaggcct actgggacag tgaatcgaca atgccgtctt ctgtctcgtg 60
gggcatcctc ctgctggcag gcctgtgctg cctgggtccct gtctccctgg ctgaggatcc 120
ccaggagat gctgcccaga agacagatac atcccaccat gatcaggatc acccaacctt 180
caacaagatc accccaacc tcgag                                     205

```

<210> 1611

<211> 219

<212> DNA

<213> Mus musculus

<400> 1611

```

gaattcggcc aaagaggcct atgcactaac ttcaggaacc agctcatgat ctcaggatgt 60
atggaaaaaat aatcttttga ttactattgt cagcaattgt gagcatatca gcattaagta 120
ccactgaggt ggcaatgcac acttcaacct ctttcttcag tcacaaagag ttacatctca 180
tcacagacaa atgatacgca caaacgggac acactcgag 219

```

<210> 1612

<211> 656

<212> DNA

<213> Mus musculus

<400> 1612

```

gaattcggcc aaagaggcct actctctgtc tctcgattac aatcatgatt tccagaatgg 60
agaagatgac gatgatgatg aagatattga ttatgtttgc tcttggaatg aactactggt 120
cttgctcagg tttcccagtg tacgactacg atccatcctc ctttaagggt gccctcagtg 180
cctctgtggt aaaagtgaat tcccagtcac tgagtccgta tctgtttcgg gcattcagaa 240
gctcattaaa aagagttgag gtccttagatg agaacaactt ggatcatgaat ttagagttca 300
gcatccggga gacaacatgc aggaaggatt ctggagaaga tcccgcctaca tgtgccttcc 360
agagggacta ctatgtgtcc acagctgttt gcagaagcac cgtgaaggta tctgccagc 420
aggtgcaggg cgtgcatgct cgctgcagct ggtcctcctc cactctgag tcttacagca 480
gcgaagagat gatTTTTTggg gacatgttgg gatctcataa atggagaaac aattatctat 540
ttggtctcat ttcagacgag tccataagtg aacaatttta tgatcgggtca cttgggatca 600
tgagaaggggt attgcctcct ggaaacagaa ggtacccaaa ccagccggca ctcgag 656

```

<210> 1613

<211> 166

<212> DNA

<213> Mus musculus

<400> 1613

```

gcagtctcag aagttcccca acattgtgct tctatatctc ctctctcagt tgagtctcac 60
catgcactca gtcactcaaa ttagaaatgg tgtgcttatt tttggatatc tttctcttcc 120
catatccagt ctaatgccta tctatgctta ttctgaatcc ctcgag 166

```

<210> 1614

<211> 805

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (337)

<400> 1614

```

gaattcggcc aaagaggcct acttttcaga acctttttta aagggttgggt taactacctc 60
agtagcagag gattgaacta taccctgtct gtactgtaca tagaaaatct ttgtagataa 120
aagcaaggct tgttaaatat gatatgaggg taagatttta atataccaaa tgtaacattc 180
ttagttgcct ttagtttcag aggcttgtaa gacttccctc tgaccatcat aacaggcctt 240
gcttttgcgt tattttgtgg ctgaaaaagc agccttgctt cttcagatat ttagtattat 300
tggaagtata atagtttagc aagatgttac ttttgnaga catcagatgt tcaaaaaaaaa 360
agtgcatacc aacttgtaact aaatactgca gtgtcccttt ataaaaagtc agactaaaac 420
tgacaattgt acagcaaagc ctgacatttg gatattttga agttttttca taaatcatag 480
aaattagtat atggctgtag tttagctttt taggtaaaag gtatgtttca ttagtgcatt 540
tgttattgct gatcactata aaaatgtgaa tcagctttcc atttcttatg cagggtcatga 600
taactttagt aatagagtac aatcatttgt gctatgtttt caatttttca aagcaccttg 660
atgacagtga gtgttcagtg gtgaagcacc ctctattgaa tcaccctcaa aaaatttttt 720
tgccaaagtc taagttgata gcttaaagtc aaaagtaaaa ttatagttta agtaggactt 780
ggtgtaaaaga aacaccccc tcgag 805

```

<210> 1615

<211> 111

<212> DNA

<213> Mus musculus

<400> 1615

gaattcggcc aaagaggcct agtttttttca agggggaaca tggcaaaggt gttcagtttc 60
 atccttggtta ccaccgctct gataatgggc agggaaattt cggcgctcga g 111

<210> 1616

<211> 549

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (26)

<220>

<221> unsure

<222> (130)

<400> 1616

gaattcggcc aaagaggcct agttttcgggt atctgctggt cacagctctc cactgtaatc 60
 cgaatacttt gccagtgcac taatctcttt ggagataaaa ttcattagtg tgttactaaa 120
 tgttaatttn cttttgcgga aaatacagta ccgtgtctga attaattatt aatattttaaa 180
 atacttcatt ccttaactct ccctcatttg cttttccac agcctattca gttcctttgt 240
 ttggcaggat tctgcaaaat gtgtctcacc cactactgag attgttcagc ccctgatgta 300
 tttgtattga tttgtttctg gtggtagctt gtcctgaaat gtgtgtagaa agcaagtatt 360
 ttatgataaa aatgttgtgt agtgcattgt ctgtgtggaa ttcagaggaa aaccagatt 420
 cagtgattaa caatgccaaa aaatgcaagt aactagccat tgttcaaag acagtgggtgc 480
 tattttctctt ttgtggcctt ttagactttt gttgccctaa aattccattt tattggggaac 540
 cgcctcgag 549

<210> 1617

<211> 441

<212> DNA

<213> Mus musculus

<400> 1617

gaattcggcc aaagaggcct agcaggagcg gagggaaacag gagcggaggg aacaggaacg 60
 gaaggagcag gagcggcggg agcaggagca ggagcgtctt cgggccaaga gggagatgca 120
 ggagagagag aaagccctgc gactccaaaa ggaacgactt cagaaggaac tggaggagaa 180
 gaagaggaag gaagagcaac agcgcctggc tgagcagcaa ctgcaggagg agcaggcaaa 240
 gaaagctaag gaggtggcag cagccaggaa agtcctgaac atgactgtgg atgtgcagtc 300
 tcctgtttgt acctcatatc aaatgactcc acaaggaccc aaatccatcc ccaagatcag 360
 cgtagacgat tatgggatgg acctaaatag tgatgactcc acagatgatg agtcccaccc 420
 ccggaacccc atcccctcga g 441

<210> 1618

<211> 110

<212> DNA

<213> Mus musculus

<400> 1618

gaattcgcgg ccgcgtcgac cagcttttgg taccatgagg tcacttcaga tgctgctcct 60
 ggctgctctg cttctgggga cttttctgca gcatgccaga gctgctcgag 110

<210> 1619

<211> 503

<212> DNA

<213> Mus musculus

<220>
 <221> unsure
 <222> (66)

<220>
 <221> unsure
 <222> (106)

<400> 1619
 gaattcgcgg ccgcgtcgac ggaccccgca ccccccctccc ccacatccac atcaccgcgt 60
 gtgcanccag gagaggaggc tcagggtgac gacctctccc cagacngcct gtccgagcag 120
 ggcaaacagc agcccccgag cagcgcgtgc gcagcctgtg ggcagcgggt gcacctgggt 180
 cagcgggtact tggcggaggg cagactctac caccggcact gcttccgatg tcggcagtggt 240
 tccagcacgc tgggtcccagg ctcttacagt agtgggcccg aagaaggcac ctttgtgtgt 300
 gcagaacgct gcaccaggct ggggtccggga agtcgggtcag gaactaggct ctttccacag 360
 caaaggcagc agccagcggc ggcagaagct aaagatgcag aggataatga cccaagcctg 420
 agtgtggctg cagtggctga ggcagacagg ctccaggcca gctccgaggt acagtccac 480
 accccaacca agcacacctc gag 503

<210> 1620
 <211> 329
 <212> DNA
 <213> Mus musculus

<400> 1620
 gaattcgcgg ccgcgtcgac actcaattaa ccatggggcga tggtgactcg ccaatgtgcc 60
 tctctgccgt ttcattcaag ggaataagat gctggctgga caaactgtta ctttgggctc 120
 ttacaatttc tatcacactt cagaatgctg cagtggattg tacgaggggt gaaaataacg 180
 aattaccttc tccaaatctg aactcaagta tgaacgtggc caggatgggc caaaatgtat 240
 ctctgtcttg ttccaccaag aacacatcag tagacatcac ctattcgctc ttctggggta 300
 caaaatatct agaaagcaag aaactcgag 329

<210> 1621
 <211> 267
 <212> DNA
 <213> Mus musculus

<400> 1621
 gaattcgcgg ccgcgtcgac ccgagccaga gccaacatga agacagccac agtcttggtt 60
 ctgggtggtt tgatcactgt ggggatgaac actacctatg tagtgtcttg ccccaaagaa 120
 tttgaaaaac ctggagcttg tccaagcct tcaccagaaa gtgttggaat ttgtgttgat 180
 caatgtctcag gagatggatc ctgccctggc aacatgaagt gctgtagcaa tagctgtgggt 240
 catgtctgca aaactcctgt cctcgag 267

<210> 1622
 <211> 263
 <212> DNA
 <213> Mus musculus

<400> 1622
 gaattcgcgg ccgcgtcgac aacatggttg gaacactggt tggctctgcc ataggaggag 60
 ctctggctgt ggcaggggca cctgtggccc tggctgccat gggcttcact gggacaggca 120
 ttgcagctgc ctccatagca gccaaagatga tgtctgtgac agcaattgcc aatggagggt 180
 gagttgcagc aggaagcctg gtagccacac tccaatcagc aggggtcctt ggactctcca 240
 catcaacaaa tgcacacctc gag 263

<210> 1623
 <211> 185
 <212> DNA
 <213> Mus musculus

<400> 1623

```

gaattcgcgcg ccgcgtcgac cgattgaatt ctaaaccctgc cttggttacc tttcctttcc 60
cctttaagag gaattagcta tagaaccgct ttgtaaagat gcttcttgat attttacttt 120
tgttcctttc cccaaccatt ccacttccc cttctctcca cagcccgat ccactccac 180
tcgag                                             185

```

<210> 1624

<211> 695

<212> DNA

<213> Mus musculus

<400> 1624

```

gaattcggcc aaagagccta ggcacaaatga agtgggtaac ctttatttcc cttctttttc 60
tcttttagctc ggcttattcc aggggtgtgt ttcgtcgaga tgcacacaag agtgagggtg 120
ctcatcgggtt taaagatttg ggagaagaaa atttcaaagc cttggtgttg attgcctttg 180
ctcagtatctt tcagcagtggt ccatttgaag atcatgtaaa attagtgaat gaagtaactg 240
aatattgcaaa aacatgtgtt gctgatgagt cagctgaaaa ttgtgacaaa tcacttcata 300
cccttttttg agacaaatta tgcacagttg caactcttcg tgaaacctat ggtgaaatgg 360
ctgactgctg tgcaaaacaa gaacctgaga gaaatgaatg cttcttgcaa cacaaagatg 420
acaacccaaa cctcccccca ttggtgagac cagaggttga tgtgatgtgc actgcttttc 480
atgacaatga agagacattt ttgaaaaaat acttatatga aattgccaga agacatcctt 540
acttttatgc cccggaactc cttttctttg ctaaaaggta taaagctgct ttacagaat 600
gttgccaagc tgctgataaa gctgcctgcc tgttgccaaa gctcgatgaa cttcgggatg 660
aagggaaaggc ttcgtctgcc aaacagcgac tcgag                                             695

```

<210> 1625

<211> 692

<212> DNA

<213> Mus musculus

<400> 1625

```

gaattcggcc aaagaggcct acgaagcact tggtcagacc caggaaactc ttctctagtc 60
gcatccagct cggtaaccgag caccagagta atatgggtctg caagggtgctc atcgccctct 120
gcatcttcac cgcaggactg aggggtacagg gttcaccaac agtcccattg cctgtctctc 180
tcatgacaaa aagttcagca cctgtggcca cctggactac ctctgctcca cacactgcta 240
gggccaccac ccctgtagcc agtgccactc acaacgcctc agttctccgc accactgccg 300
catccctgac atctcagctc ccactgacc acagagaaga agctgtcacc agcccacctt 360
tgaagaggga tgtcaacagc acagactcct cacctgccg gttccctca acaagcagtg 420
atggccactt ggcacccaca cctgaggaac acagtcttgg aagtcctgaa gcaactgtgc 480
cagctactgg gtcacagtea cccatgctcc tgtcttctca ggctccaacc tcagcaacca 540
catcccccgc aacttcccta tcggagtctc tctctgctc cgttacctct agccacaact 600
ctacggtggc caacatccag cccacagaag ctccaatggc acctgcgtca ccaacagaag 660
agcacagctc tagtcacaca ccagactcg ag                                             692

```

<210> 1626

<211> 130

<212> DNA

<213> Mus musculus

<400> 1626

```

gaattcggcc aaagaggcct agggctggat gttcaacaag atttgtgatt ccaaaataat 60
cttctctctt gggattttcc tctgtaaggt caaagccgtt gggtatgatg tacgagtccc 120
ccactcgag                                             130

```

<210> 1627

<211> 495

<212> DNA

<213> Mus musculus

<400> 1627

```

gaattcgcgg ccgcgtcgac ccctatgctg cctaggctga ccttgaactc ctgggctcaa 60
gcagtctacc cacctcagcc tcctgtgtag ctgggattat agattggagc caccatgccc 120
agctcagagg gttgttctcc tagactgacc ctgatcagtc taagatgggt ggggacgtcc 180
tgccacctgg ggcagtcacc tgcccagatc ccagaaggac ctcccgagcg atgactcaag 240
tgtctcagtc cacctgagct gccatccagg gatgccatct gtgggcacgc tgtgggcagg 300
tgggagcttg attctcagca cttgggggat ctgttgtgta cgtggagagg gatgagggtc 360
tgggagggat agaggggggc tgccctggccc ccagctgtgg gtacagagag gtcaagccca 420
ggaggactgc cccgtgcaga ctggagggga cgctggtaga gatggaggag gaggcaattg 480
gaatgcgcgc tcgag

```

<210> 1628

<211> 602

<212> DNA

<213> Mus musculus

<400> 1628

```

gaattcgcgg ccgcgtcgac gggaacctag ctgatgatag ggggttccat ctccctaactt 60
gtccattttg ttgcataatc taaggaccca gacataggct tgggtggccc tctcttgttt 120
ttcctgtgtt atgactttcg gctttgtgga atacggctga gatgaaagga tttattgacg 180
atgcgaacta ctccgttggc ctgttggatg aaggaacaaa ccttggaaat gttattgata 240
actatgttta tgaacatacc ctgacaggaa aaaatgcatt ttttgtggg gatcttggga 300
agatcgtgaa gaagcacagt cagtggcaga ccgtggtggc tcagataaag ccgttttaca 360
cggatgaagt caactccact ccagccgtgc ttgagatctt ggcagctctt ggaactgggt 420
ttgcttgttc cagcaaaaaa gaaatggctt tagtgcaaga attgggtgta tctccagaaa 480
acatcatttt cacaagtctt tgtaagcaag tgtctcagat aaagtatgca gcaaaagtgt 540
gagtaaatat tatgacatgt gacaatgaga ttgaattaaa gaaaattgca aggaatctcg 600
ag

```

<210> 1629

<211> 167

<212> DNA

<213> Mus musculus

<400> 1629

```

gaattcggcc aaagaggcct agtggtagta atctgattga ctgaatgcat ggacattatc 60
atctgttgct agccctgagc ttagtggtga caatatatct ggtattgaca aagagtatgt 120
ttgctttagg cccaaaagat aagaaaatag gcatagtgga gctcgag

```

<210> 1630

<211> 639

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (61)

<220>

<221> unsure

<222> (622)

<400> 1630

```

gaattcgcgg ccgcgtcgac tcctgtggca aatacccgga ttaaaagggtc gtgaaaatac 60
ntgagataat catgaaggca actctcatct tcttccttct ggcacaagtc tcttgggctg 120
gaccatttga acagagaggc ttatttgact tcattgctaga agatgaggct tctggcataa 180
tcctttatga ccttgacaat cccctgatat ctatgtgccc cgtttgcgtc cagcctgaga 240
ccaccgtttc cctacgtccc accagggcta tggcctcatg cgacgagata aaagagcatc 300
cccgtcctt gtctatgtgt ggccatgttg gttttgaaag cttacctgat cagctggctg 360
atagatccat tgagcaaggc ttctgtttca atattctctg tgtgggggag actggaattg 420
gaaaatcaac actgattaac acattgttta atactaatct tgaagaactc gaatcctcac 480

```


atctttgtcc atgtgttaga cttagagctc agacatatga actccaggaa agcaatgttc 540
 gcttgaact gaccattgta aatacagtgg gctttggtga ccaaatcaat aaagaagaca 600
 gctatcaacc aatagttgat tnacatagat gatctcgag 639

<210> 1631

<211> 390

<212> DNA

<213> Mus musculus

<400> 1631

gaattcggcc aaagaggcct agctaaaggg gagatctgga tggcatctac ttcgtatgac 60
 tattgcagag tgcccatgga agacggggat aagcgtgta agcttctgct ggggatagga 120
 attctggtgc tcctgatcat cgtgattctg ggggtgccct tgattatctt caccatcaag 180
 gccaacagcg aggctgccc ggacggcctt cgggcagtga tggagtgtcg caatgtcacc 240
 catctcctgc aacaagagct gaccgaggcc cagaagggtt ttcaggatgt ggaggcccag 300
 gccgccacct gcaaccacac tgtgatggcc ctaatggctt ccctggatgc agagaaggcc 360
 caaggacaaa agaaaatgga gggactcgag 390

<210> 1632

<211> 676

<212> DNA

<213> Mus musculus

<400> 1632

gaattcggcg ccgcgtcgac ccccaaccat gcttctccta gatgcccaga cccagattca 60
 tcacagtgtc ctgctgttga tcctgctgct gggacttaaa ggagccgctg ggaaagagtt 120
 gaaggtgata cagcctgaga aatcagtttc tgttcgtgct ggaggggtcg ctactctgaa 180
 ctgcacagtt acatccctcc tcctgtggg gcccatcagg tggtagcgag gtgtaggaca 240
 caggagaaac ttgatataat cttacacagg agaacttcc cccagaataa caaatgtttc 300
 agatactaca aacagaagaa acctggactt ttctatctgc atcagttatg tcacttttgc 360
 tgatgctggt acctactatt gtgtgaagtt ccagaaagga ccatcagagc ctgacattga 420
 gattcagctc ggaggcgcca ctgagttggt tgtccttga gccgctggaa aagagttgaa 480
 ggtgatccag cctgagaaat cagtttctgt tcgtgctgga gggttggcta ctctgaactg 540
 cacagtgaca tccctcatcc ctgtggggcc catgaggtgg taccgaggtg taggacacag 600
 gagaaacttg atatattctt acacaggaga acacttcccc agaataacaa atgtttcaga 660
 tgctacaaag ctcgag 676

<210> 1633

<211> 203

<212> DNA

<213> Mus musculus

<400> 1633

gaattcggcc aaagaggcct agattctgcc ctaggatgct gactttcaac aagatgaaga 60
 ctacaacttg ttcccttctc atctgcatct cccttctcca gctgatggtc ccagtgaata 120
 ctgaggggac cttagaatct attgtggaga aaaagggtcaa ggaacttctt gccaatcgag 180
 atgactgtcc ctccacactc gag 203

<210> 1634

<211> 213

<212> DNA

<213> Mus musculus

<400> 1634

gaattcggcc aaagaggcct atggatcatg acacttcttt ttcttggcac taccggcagt 60
 cctgttcaga atgagcaagg ctttgtggag ttcaaaattt ctgggcctct gcagtacatg 120
 tgggtgtacc atgtggtggg cctgatttgg atcagtgaat ttattctagc atgtcagcag 180
 atgacagtgg caggagctgt ggtaactctc gag 213

<210> 1635

<211> 226

<212> DNA

<213> Mus musculus

<400> 1635

```

gaattcgcgg ccgcgtcgac cgagtacagg tgagtaatat taggtgtgta atttagctaa 60
ctagttaaca ggtttgaatc tgatcctggg aaccttagct tctgaccttt gtctctgcca 120
acacagtagg aattcagggt ctcacaactt ctttgcattc gctttagtta ctgctgctta 180
ggtagagcaa gacagcgtg caatgaaggg acaattattt ctcgag 226

```

<210> 1636

<211> 270

<212> DNA

<213> Mus musculus

<400> 1636

```

gaattcgcgg ccgcgtcgac gattgaattc tagaccccc cccttccaag ctgctgtgtt 60
gacgagactg cctgtctgcc ttccagggtg tgctactgaa ctagatttcc ctggtgttac 120
agagggttatt agtatttatt ttaattttgc tataatgttg ttatgcttta ctggttattc 180
tttttgtgtt ttaacttaac agcctgcact aatgtgaata ccaccaact gtgggggtca 240
catctggaac cttgtaacct tgtgctcgag 270

```

<210> 1637

<211> 213

<212> DNA

<213> Mus musculus

<400> 1637

```

gaattcgcgg ccgcgtcgac actctttgac atgttcccaa accagttccg gtttgtggg 60
aatgccaga acacctggc ccagcccacc gtgtggctca ccatcgcgct caccacggct 120
gtctgcatca tgcctgtggt tgcttccgc ttctcaggc ttagcctgaa gccggatctc 180
tccgacacgg tccgtacac ccagcacctc gag 213

```

<210> 1638

<211> 277

<212> DNA

<213> Mus musculus

<400> 1638

```

gaattcgcgg ccgcgtcgac acagaatgtt agcatcatca gtctggaagg tgaaaagaga 60
gatgggttgg aactgttttc ttttcttttg ctgctcccca tttcttcttt gcctccctcc 120
tgctgctcag ctgcctctaa ggcagcccc caccctcgca gtaccttgca acaggctctg 180
gagattgagc tgcgcctcgc gaagcagttc ctctacactc gggggcctgc ccgaggagag 240
gaacacgttc actggctgtc gccatgacga cctcgag 277

```

<210> 1639

<211> 371

<212> DNA

<213> Mus musculus

<400> 1639

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctcgagctca 60
cccttcatca ctgccagggt ccccgctctg gaaccacagc tgccaggcag tgtctttgac 120
cctattggcc acttcaccca gcccatcttg cacctgccgc agccggagct gcctcctcac 180
ctgccccagc cacctgagca cagcactcca ccccatctca accagcatgg ctgtgggtctc 240
tcctccagct ttgcaaaatg agctgcccc acagccatct cggcccagta accgagctgc 300
tgctctgccc ccaaagccta cccgaccccc agctgtgttc cgtgccctgg cccagccccc 360
cctatctcga g 371

```

<210> 1640

<211> 194
<212> DNA
<213> Homo sapiens

<400> 1640
gaattcgcgg ccgcgtcgac ggcatgaaaa aaagtgcacat ctccacagta agccctgcta 60
cagagtctat gcgctactgc aaagccctac tgctaacaat ccacccttcc atccttgctt 120
ccatccgtcc ccateccacc ttccaatcca tccatccact cattcatcca tccaccttcc 180
catccatcct cgag 194

<210> 1641
<211> 539
<212> DNA
<213> Homo sapiens

<400> 1641
gaattcggcc aaagaggcct agtttctgta ctttttattg ggtaaaaatg gaattgaaca 60
gcaacctcaa cataagattt tttttctagt accctcccac tgattaaaga agcaagtgtg 120
aggtttcatc cttcaaaaagg gggttccgag agagcaccgt agggcttttc tcaaatagaa 180
aagccagatt ttgaaaaaat tttaaagata aaataggaca tattttgcag atatatatat 240
atatatacac aaacacatct ccaggatatag agaaccatcc agatgttcac ttttgaaaat 300
atctaattgat caaaagtgtt attccttgaaac ttgggacactg atgccatcaa acaattaaca 360
aatatatatta agtactaaag gtgatttttt ttttaaagac tttttcaa at tgcataatga 420
tttaattgcag atgaacatat ttctatttta agtaacggga atctgtaaga atgtttgctt 480
gagatatggt taactttttt cttttgttgg ttttgactta gatggacacc atactcgag 539

<210> 1642
<211> 193
<212> DNA
<213> Homo sapiens

<400> 1642
cctaaaccgt cgattgaatt ctagacctgc ctcgagcata tatacccctt tttctcagtc 60
ttaagcatca aacaatttct gcctctttct ttttaattct cccagaggga tggttaatgc 120
atcacaaattt aacttgctta ttcagggtatt aatagtcaag ggatgcatct gtttgcttat 180
agtaccactc gag 193

<210> 1643
<211> 192
<212> DNA
<213> Homo sapiens

<400> 1643
gaattcgcgg ccgcgtcgac ggatctactg ccttcacacg cgctcctttt aacttaaaac 60
actgctttca ccttaaaaga gaaacaagag gaacacacgg acgccagaaa gagaatgacg 120
gaaacggagg tgtcatctcc agcagggtcc gaatcctcag atggaaccac aggccaccag 180
gccaaactcg ag 192

<210> 1644
<211> 958
<212> DNA
<213> Homo sapiens

<400> 1644
gaattcggcc aaagaggcct actgctcttc ataactgagt tgagtagttt ttcttgaatg 60
attacttttc aatttgytat acacctgtgc ccactttcct gagttctgat atagtgggtt 120
gacatgtttg tctagttttt tcatagaatt ttggagagac gctctgttga gctcactcta 180
ctattccagc agttccccc ttaccttttt actttatacc tttcttttag gttctcatat 240
ttttaagaga aatgggtcta ttcataattat gtttttcttc acattattat gcttttactc 300
ttaatttata ggtgctcaga aacacttttt atgcagtgtt taaatgtttt tagaagcttc 360

```

ttaatcaaat atttccaggc cccttgaaca tagtagttgt tgagatattc attaaatgct 420
catttagtag agttttaaag gtttatttaa tatctgcttt gggtaagta ctataacccat 480
agtgtgactt tagagcatgg actttgaagt tgaacgtgtg taagaatcct ctctctgtta 540
atggacatgt gaccttgaac aagttactta attcttctct tttgaatgtc ttcggccata 600
aaataaaact tcagaggagt aaatgtgact taaggcataa tatttgcctt acattaagta 660
ttcagtaagt gataacttgt gagaatgtgt gagaagaatg tataataata gtttctactt 720
aattattaag gtaagtgaac gtattttctt tctttttctt ttaagagacg gggctctgct 780
atgttgccca ggcttctctt gaactcttgg cctcaagcag tgctcctgag tagctgggat 840
tacaacatg agccactgca cctggctcat tttaaagatg gtaaaactca gattagagaa 900
ggaaagtaat ttggcatgat cgtactgtta atgagttcca gaaagaggag tactcgag 958

```

<210> 1645

<211> 231

<212> DNA

<213> Homo sapiens

<400> 1645

```

gaattcgagg cgcgctcgac catagctaga acctggcagt gccagaattc aagccgaagc 60
taatgggctt tgaaggcaga gttcatctgc cagccttgtt gcttcttttt ctccctctg 120
ctgagaagca aggaacagag cagtgactgt atccctggc tacacattag aattacctgc 180
aattcttttt ttttttgaga cggagtctcg ctctgtaacc cctcactcga g 231

```

<210> 1646

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1646

```

gaattcggcc aaagaggcct agcctgctga cgactttttt aaacttttat ttttaaatat 60
tttttagaat atcactaaaa tactgttgca atcattttta gttcaaagt ttaaaaccga 120
aaatcctata ttctctgaca gtaaattctg gttcttagaa agtagctcaa aaacaaatgc 180
gtcatcctct actttggaag gttccaaatg ataacagatt caaatctacc aagaccctc 240
atcccaacca aatgtctcta aataccaaga tctcagatta ccctggaatt tttttttttt 300
tttttttttt tttttttttt tttttttttt ggcttcaaat caagtttaaat aaataaaaca 360
gcaaaggggg gttcaaggca gttatcactt cacagtgtgg tccttggtgg ggtgagggat 420
ggctcgagtcc aactcggaaa ggggctcgag 450

```

<210> 1647

<211> 120

<212> DNA

<213> Homo sapiens

<400> 1647

```

gaattcggcg cgcgctcgac ctggatttgt actctgtaga taccgcaaac attccttctt 60
tatttgtagt tctgtcttat gaaggcattt gagtttgtga cctctgctgt gctactcgag 120

```

<210> 1648

<211> 388

<212> DNA

<213> Homo sapiens

<400> 1648

```

gaattcggcc aaagaggcgg gaatttgccc ctccaagcca agaattcggc acgaggggtca 60
ggctccttgg ggaatggggc ccacatgatg tattcacaag tcttccaagc gactgtcaac 120
ttgggtccag aagactggag accacatggt tgggaattat gctgggcctt ctacatggcc 180
tggtctctct tcacctgctg catggcgctg gctgtcacca ccttcaaac gtacaccagg 240
atgggtgctg agttcaagt caagcatagt aagagcttca aggaaaaccc gaactgccta 300
ccacatcacc atcagtgttt ccctcggcgg ctgtcaagt cagcccccac cgtgggtcct 360
ttgaccagct accacccttc ctctcgag 388

```

<210> 1649

<211> 334

<212> DNA

<213> Homo sapiens

<400> 1649

```
gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgagggaaa 60
aaaaagccaa atttcttggt gctacaggat ataacaacaa tgaaaaggat ctcgtatttt 120
aaaaaaatat gtaattttta taaaaagaaa acttggtttt cattcaaact tgtcattttt 180
actttggtaa ctttttcata ggtcctaaaa gaaaactggt ttgagaaact actgtaagta 240
ccttttcac atccctttgc cttctctctt ttccaaatc tttctacaaa aataacactt 300
gatgctggaa aaacccatgc tacgtctcct cgag 334
```

<210> 1650

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1650

```
gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgaggaaaa 60
acgtgaagct gaagcaaaaa tgatgggtgc taacaaacca gataaaatac agcaagctaa 120
aaatgaaata agagaggaaa ttgaagagtg ggaggcgaaa gtgcaacaag gggaaagaga 180
ttttgaacag atatctaaaa cgattcgaaa agaagtggga agatttgaga aagaacgagt 240
gaaggatttt aaaaccgtta tcatcaagta cttagaatca ctagtccaaa cacaacaaca 300
gctgataaaa tactgggaag cattcctacc tgaagccaaa gccattgcct agcaataaga 360
ttgttgccgt taagaagacc ttggatgttg ttccagttat gctggattcc acagtgaat 420
cattttaaac catctaaata aaccactata tattttatga attacatgtg gttttatata 480
cacacacaca cgcacccaag cacaccactc gag 513
```

<210> 1651

<211> 394

<212> DNA

<213> Homo sapiens

<400> 1651

```
gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgaggggga 60
agaccagact gagcgatttg gaatccacat cctaagtctg ccacaagctg catgcacaaa 120
gaccttaggc acatctcttc atttctctgt acactggttt ctctactatg tgtgtattaa 180
aatatataat gtggatgata gtaaaactgaa caaagcctta attttctccc aagctttgac 240
attgccaaag gcagtttaga gacttcagga tcaagttag gggacaagtt tttttcta 300
actttcaaaa ggcccaagtg aagtgaggaa ggacacctca ctttctggct ctaaaagcat 360
ggtacatctc acaccaggat aaaagcacct cgag 394
```

<210> 1652

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1652

```
gaattcggcc aaagaggccg gaatttggcc ctcgaagcca agaattcggc acgaggggtg 60
ataccttccc tcccaggctc cttaccttgg tcttttccct gttcatctcc caacatgctg 120
tgctccatag ctggtaggag aggggaaggca aaatctttct tagttttctt tgtcttggtc 180
atthttgaatt catthtagtta ctgggcataa cttactgctt tttcaaaaag aaacaaacat 240
tgtctgtaca ggthttcatgc tagagctaatt gggagatgtg gccacactga cttccatttt 300
aagctttcta cthttctttc ctccgacctg cccctccct caccctcacg ctcgag 356
```

<210> 1653

<211> 399

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (236)

<400> 1653

```
gcctgcgtca gattaaaaca ctgaactgac aattaacagc ccaatatcta caatcaacca 60
acaagtcatt attaccctca ctgtcaaccc aacgcaaccg ccatctcgaa gccagattcg 120
gcacgagggt gcacgcgggt gattgccaag gagaattacc ccctctacat tcgcagcacc 180
cctacggaga acgagctgaa gttccactac atgggtgcaca catctctgga cgtggnggat 240
gagaagatct ccgcaatggg gaaggccctg gtcgaccaga gggagctgta cctgggcctg 300
ctctacccca cggaggacta caaggatatac ggctacgtca ccaattccaa ggtgaagttt 360
gtcatgggtg tagattcctc caaacacagc ccgctcgag 399
```

<210> 1654

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1654

```
gaattcggcc aaagaggccg gaatttgccc ctggaagcca agaattcggc acgggggcta 60
actggctgag aatcaagaaa taaattattt tgtgaaattg aattctgtta gtttctcctt 120
aatctgtatt tgtgtcagat tttcaattgt aaataacttt agcaatttgg agagtctatt 180
attgcctatc aaattgtgta tctgcacagt ttttgaaaag ctagagaatg tgactttaca 240
agcttatttt ggtgcttggg gacaggctcg gaaaaacgag tcatgtgact gagactcctc 300
aaaagtccac cactaattcc ttgttctact gag 333
```

<210> 1655

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1655

```
gaattcggcc agccaaagag gccggaattt ggccctcgaa gccagaatt cggcacgagg 60
cataggattt gttcacatag tgttatgcat gatcttcgta aggttaagaa gccgtggtgg 120
tgaccatga catccaaccc gtatatataa agataaatat atatataat gtatgtaaat 180
tatagcactg agggccctgc tgccctgctg gaccaagcaa aactaagcct tttggtttgg 240
gtattatgtt tcgttttgtt atttgtttgt ttttgtgggt tgtcttatgt cgtggcagac 300
caagtactct cgag 314
```

<210> 1656

<211> 152

<212> DNA

<213> Homo sapiens

<400> 1656

```
gaattcgcgg ccgcgtcgac accgctcact cgggggaaat ggattcttta ccacggctga 60
ccagcgtttt gactttgctg ttctctggct tgtggcattt aggattaaca gcgacaaact 120
acaactgtga tgatccacta gcacccctcg ag 152
```

<210> 1657

<211> 251

<212> DNA

<213> Homo sapiens

<400> 1657

```
gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctatcactat ctgcccgtgc 60
ccatggatga gatggggggg aagcaaggat ggggcagcca ccggcagtgg ctggggggccg 120
cgatcttggg ggtcctgttc ggggttacct tagtcacct gacaatctac ttcgccgtca 180
cagcgaacag cgtggcctgt agagacgggt tgcgagcgca ggctgagtgc cggaacacca 240
cgccactcga g 251
```

<210> 1658

<211> 227

<212> DNA

<213> Homo sapiens

<400> 1658

```

gaattcgcgg ccgcgctcgac ataatatctt acctagggtt taagttattt taatcagtta 60
gacaaattag ctagacaaaa agtatgagca agaagaaagt ctgtttgcag attgccgtta 120
tctgggcatt catgcttttg gcatttcac taactatcca ttccctagcg gaaaatgggc 180
aagaagtact atgttcattt aaaaaccatc ttgaaattgt actcgag 227

```

<210> 1659

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1659

```

gaattcgcgg ccgcgctcgac ctgcactgtt tcagtctttc actcttagca ggaatttgga 60
gatgactttt gatgacaaga tgaagcctgc gaatgacgag cctgatcaga agtcatgttg 120
caagaagcct aaaggtctgc atttgccttc ttcccatg tggttccctg ctgctatgac 180
tctggtcac ctcgcctg tggtgtcagt gaccttatt gtacagtggg cacaattacg 240
ccaggatctt gacctcttaa aacaatacca agcgaacctt actcagcagg atcgtatcct 300
ggaagggcag atgttagccc agcagaaggc agaaaacact tcacaggaat caaagaagga 360
actgaaagga aagatagaca ccctcaccca gaagctgaac gagaaatcca aagagcagga 420
ggagcttcta cagaagaatc agaacctcca agaagccctg caaagagctg caaactcttc 480
agaggagtcc cagagagaac tcaagggaaa gatagacacc cccacctcg ag 532

```

<210> 1660

<211> 163

<212> DNA

<213> Homo sapiens

<400> 1660

```

gaattcgcgg ccgcgctcgac aggcccagat gaataaacta attaaaatat ttaaagccca 60
tctgtttcat taacagatgc attttaaaac aaatatagtt acttttattg gttacctaata 120
tctaaaatta ttttgatcaa tgataactat gaaaatgctc gag 163

```

<210> 1661

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1661

```

gaattcgcgg ccgcgctcgac cgagcgtgtt acttttactt tgttctgttt taaaatgctg 60
actcttctaa gaccogtgca ttccacatg gaattaacca tcagtttgct aaatttttta 120
aaatcttgtt aagaatttga ttgggaaggc cttgaggaag ctatagataa gtctgagtag 180
aactgacatc tttgtaacaa gtcttctaata ctatgaatgc ggtatatatc ttcatctgtg 240
taggtctttt taagttccaa taattttctg taatttgagg tacagatttt acacatatct 300
ggttaaaactt atacctgagt attttacaat ttactctat tatgcatggt acttgcccat 360
ttcatcttta tttgtattat ttttttttta agatggagtt ttgctctgtc acccacgctc 420
gag 423

```

<210> 1662

<211> 138

<212> DNA

<213> Homo sapiens

<400> 1662

```

gaattcgcgg gccgcgtcga cgagttggtg tgtatttctt tcatatccaa tttcccgctt 60
tcctctgcct ctgacacctg cctctccttt tctcctgct caggttcttt catgcttagt 120

```

ttcctcagat ggctcgag

138

<210> 1663

<211> 307

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (35)

<400> 1663

```

gaattcgcgg ccgcgtcgac cacctactct acganacaca aagttctatg gtctcgaaga 60
agccccgtgcc tgtttaaaac tgatcctaac taaaaacaga cttgagtggga tatgagaatg 120
ttggttagtgc gcagaagagt caaaaaatgg cagttaatta ttcagttatt tgctacttgt 180
tttttagcga gcctcatggt tttttgggaa ccaatcgata atcacattgt gagccatattg 240
aagtcataatt tcttacagat acctcataaa tagctatgac tttgtgaatg ataccctggc 300
tctcgag                                     307

```

<210> 1664

<211> 231

<212> DNA

<213> Homo sapiens

<400> 1664

```

gaattcgcgg ccgcgtcgac cgagttctta gcattttcac agtggttaaag cacaaatattc 60
aggtttcgagg cataaggtag aatgagacca cttcggaact tccgatgcat ttgttttctg 120
tctccgtgcc tccggcttcc caaagagatc caggtctttg cgtttccagg gcgtggggac 180
cccggccccc tatgccgcca cgccgccaca ccgcctcacc cctggctcga g 231

```

<210> 1665

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1665

```

gaattcgcgg ccgcgtcgac cataaagaaa ggacacatat ttcaggtgat ggatattcca 60
agtacactga tttgattttt acaaaattaca taaatgtatt aaattatcat aaaaataaga 120
aacaaaacaa taaactgaga aaaaaattta aatgacctac aacctaatat ttaatgcctg 180
catggtattc ttgtgtatta atgtgttatt tttacttaac caattttctta ctattgaagg 240
cctgtttact gtttttctact cttctaaacc acaatgcaat aaaaacctcg ag 292

```

<210> 1666

<211> 112

<212> DNA

<213> Homo sapiens

<400> 1666

```

gaattcgcgg ccgcgtcgac gtgtgtataa aagggtctaa ttctataaat tatttgtaaa 60
ataagttaat atgttatgtg tgtatgtgtg tgtgtgtgag tgtgcgctcg ag 112

```

<210> 1667

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1667

```

gaattcgcgg ccgcgtcgac aaatatttat caatactgat cagactttta agaaattact 60
ttgtaaacct gctgactacc tgtatgtatt gtatatatat tatatattaa atatataata 120
tattgagatt ataaaagatg aaaatattga atccttataa tattttaagt tgcagaatgt 180

```



```

atgttaaaaa gtgacttgaa tgagatgtat ttgtatctag aaatctttatt tcttttttga 240
atgagattaa aatacatttt gaaagttcag cagagtaagc aatttatttg tgttgccat 300
gtgtgagtgt attttaaagtt ttatggacgc ttaatgggtt ctcccaaatt aaaattcttt 360
ttctgtcatt tccaaaaaac agaatctttc cctctcaa atcagggtctaca ggtatcatgt 420
atgcctttgt taaataggac ttgttttaaa ttgtagtgt ctagaattag aaatattttt 480
gttttactgg ccaatctcga g 501

```

<210> 1668

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1668

```

gaattcgcg cgcgctcgac ctgttgccctg tataccttgt tttcttggtt tttgttgttt 60
ttctaattgt atttttgttt tatacgtcct gtgatattta tgctttaaag aggttctgtt 120
ttgatatgtt tccaggattt gtttcaagat ttagagttcc ttttagcatt cttgcactcg 180
ag 182

```

<210> 1669

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1669

```

gaattcgcg cgcgctcgac agttcaccat aagctagaag ttgtgtcaaa ttgagtcaag 60
attgtggctt tctcagctct ctgatcccat tttagagag acatagctgg gatagtattt 120
tgcttataat aggagtacaa tacatatctt ttgaatttat gcttaaccct tgagcacatt 180
ttttttaatg gcctggatca cgtttctctg ttttttgaca tgtttgatg ttgcccatc 240
caattacttc ctactttcag cctatgctga agttcctcct ctggcaactc tcgag 295

```

<210> 1670

<211> 156

<212> DNA

<213> Homo sapiens

<400> 1670

```

gaattcgcg cgcgctcgac gtatatataa aaatatttaa catttaacaa agtcaacact 60
gagacaagta cttactaaaa tacaagttt ttccattgaa aaaatactgt aattaaactt 120
gttaaaaaata tgggtatata ttttactctt ttacaa 156

```

<210> 1671

<211> 298

<212> DNA

<213> Homo sapiens

<400> 1671

```

gaagaagtat cggatagaaa ttaagcctat gcatccaaat aactcacatc acacagtggc 60
ttctttggat gaattaaaa tctctatagg gaatataaca ctctcccag caatatctag 120
acacagtcca gtacagatga atcggaattt gtctaattgag gagttaacaa aatcaaagcc 180
atctgctcca cccaatgaaa aaggaaccag tgatttactt gcttgggacc ccctatttgg 240
accatctctt gattcatctt cttcatcttc actaacctca tcatcatcag ccctcgag 298

```

<210> 1672

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1672

```

gaattcgcg cgcgctcgac gttcctttta gtcagtactc ttaaagctct tctggtcaca 60
gccctagcct tgtgtcatgg cttcaatctg gacactgaac atcccatgac cttccaagag 120

```

aatgcaaaag gctttggaca gagtgtggc cagcttggcg gaaccagtgt ggttgttgca 180
gccccccagg aggcaaaaggc tgtaaccag acaggtgcc tctaccagtg tgactacagc 240
acaagccggt gtcacccac cccctcgag 270

<210> 1673
<211> 255
<212> DNA
<213> Homo sapiens

<400> 1673
gaattcgcgg ccgcgtcgac agcccacatt attattaata tatagaggga ccataaatta 60
ttattatttt tgcctctgta tataccatag aatacagtaa gatatatgag tcaaagtcac 120
ccactcctct gataaatcaa tttcattctg ctatttcatt ctcttccaat tttgctgtgt 180
aaattttcaa taacaaatct ttattgttga ttatacagta tgtatactac tatcttaatg 240
actaggcttc tcgag 255

<210> 1674
<211> 225
<212> DNA
<213> Homo sapiens

<400> 1674
gaattcgcgg ccgcgtcgac attgaattct agacctgcct cgaaactttt ccattaaat 60
tcgctattta tatgagccag agtgattgat ctttcttctc tgcatattta accaaatcac 120
tcctctgttt aaaatccttc ctccagtatt aatatagcat ataaaaccat gcaaactctg 180
aagcatgcta tctcttcaat cttattttca gccactcccc tcgag 225

<210> 1675
<211> 113
<212> DNA
<213> Homo sapiens

<400> 1675
gaattcgcgg ccgcgtcgac attttaaaaa ctgatcaatt tttcatgttt acataaagta 60
taaaaaacatc tatcagtatg ctacatacca tgtttaaaac agcgatcctc gag 113

<210> 1676
<211> 159
<212> DNA
<213> Homo sapiens

<400> 1676
gaattcgcgg ccgcgtcgac ggcacccata aaatagtaaa cataagacct ttttttaatg 60
tgtgtgagat ggagtttggc tcttgttgcc caggctggag tgcagtggct attcataggc 120
atgatcatgt atttcagacc tggaagtcct gggctcgag 159

<210> 1677
<211> 132
<212> DNA
<213> Homo sapiens

<400> 1677
gaattcgcgg ccgcgtcgac cgaagaaata atacagaaac ccattcaaaa agcaaaacaa 60
ggctcattta gattccttcc aattatgtgt tttctggcgc ttcttttctt tttcgttgct 120
gagctcctcg ag 132

<210> 1678
<211> 136
<212> DNA
<213> Homo sapiens

<400> 1678

```

gaattcgcgg cgcgctcgac cccctcaaaa aatttactag aaacacatac gtttcctggt 60
tcttattact atgaaactaa attttgtcta ctttcttgat cgtttcatct caattttttt 120
ccttctcaca ctcgag                                     136

```

<210> 1679

<211> 454

<212> DNA

<213> Homo sapiens

<400> 1679

```

gaattcgcgg cgcgctcgac gcctgtaatc ccagcaccag gaatttgaga ccagcctggc 60
caacctgggtg aaacctgtgc tctactaaaa atacaaaatt agccaagtgt ggtagtgtgg 120
gcctatagtc ccagctactt aggaggctga ggcaggagaa tcgcttgaac ccaggaggca 180
gaggctgcag tgacacaaga tcatgccact gcactccagc ctgggtgaca gagcgagact 240
ctgtctcaaa aaaaaatttt ttttttaaaa aaaggacgtg agtaacatgc cttagagggt 300
ggggaggagg aaaggctgtt tcctactggg gaaatcagaa aaggtttcaa ggaggaggta 360
acatctgagc tgggcttttg cttgcagaat gcggaccagc aatgattgga gagcaggaag 420
agcaatccac atagaagaag cacagagcct cgag                                     454

```

<210> 1680

<211> 235

<212> DNA

<213> Homo sapiens

<400> 1680

```

gaattcgcgg cgcgctcgac cctaaccgt cgattgaatt ctagacctgc ctctattact 60
cctaaccat ctacaaggag aaaaaacca aatcattaat atgacttga agataactttt 120
tcatcttgct ctggccacat tgcgtttctc atccctcccc attccttcac aggtacttta 180
ctctgacatg cagaacaagg agcagctccc tgaacacatc atgtctcttc tcgag                                     235

```

<210> 1681

<211> 528

<212> DNA

<213> Homo sapiens

<400> 1681

```

gaattcgcgg cgcgctcgac tgctgcagaa ggttgccact gatgaagtga gcgcaaacag 60
aagcagctct tctctattaa cagaattaaa cactacaaag tgtttctctg gaggggtgca 120
tttcaactctt gctttcttat tttttgtggt ttgacctcag ctatcaccac tgggaagccc 180
aggaaaagct gctctgaata ttcattcact ggacaggtaa agactgggac ttcagaattt 240
tgaagacgat cttagactct tacacctgtg gtcttgctag atgtgttgat tcatgactct 300
ctcaatctgt accccaaaca ggaagggtt gggaagttaa gtatgtaaac gtgtgttccc 360
ttaagggttag aattatgtat atgtgttata acctcttatt ttagaaaaat ggagaggcat 420
actggtaact aaggagctac aaatacagac aaggaaatga catatatact aatttttaat 480
ctagattgag aaaaagggtg aaaagaatgt gaaaatatata aactcgag                                     528

```

<210> 1682

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1682

```

gaattcgcgg cgcgctcgac ttagcatcta tcaaggagc accatcatgt acggggcgct 60
gtgtgtgttt gagtcgaggt tcgtgcacat cgtggccatc tctttcacct cgctgaccc 120
caccgagctg ctcatggttg cgctgacct ccagacctgg cactggctca tgacagtggc 180
ggagctgctc agcctggcct gctacatcgc ctccctggtg ttcttacacg agttcatcga 240
tgtgtacttc atcgccacct tgtcattctt gtggaaagtc tccgtcatca ctctggtcag 300
ctgcctcccc ctctatgtcc tcaagtacct gcgaagacgg ttctctcccc ccagactact 360
cgag                                     364

```

<210> 1683
 <211> 180
 <212> DNA
 <213> Homo sapiens

<400> 1683
 gaattcgcgg cgcgctcgac ccaaaccata tcacatagtc tccctctttt tatgtttttg 60
 ttatttctgt tttgttttat gtttaccctaa ataatacattt attttttatt aacattttatg 120
 ggttatgttt accatataac ccatttttat accttactgt cctatcccca tccctcgcgag 180

<210> 1684
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1684
 gaattcgcgg cgcgctcgac cgtgagactt aagtccaaac ttgcgcttca gcagggtggaa 60
 ctgctctttt acgtagtggg aaaactcgtc ctcgtatctc atccgctggt agaggatctg 120
 cacagcctca ggagagggga cagtcttctt caccgtcaca gtcattgttc caagcttctt 180
 gtgctctggg tctttgtaga tactgagcac gcccttgaag taatgaggta aaaatctttc 240
 cagtaacagc agcacatctt ccaactcttc aagaatcccc tcgag 285

<210> 1685
 <211> 283
 <212> DNA
 <213> Homo sapiens

<400> 1685
 gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt cttttttctc tttgcatttg 60
 agtttcagaa atttctattg acatagcttc aaactcagag attattctct tggctgtgtc 120
 cagtctactt atgagcctat caaaagcatt cttcatttct gttactgtgt tttttttatc 180
 tctagcatgt cttttttatg atttcttagt ttccatccct cttcttcaag ggcagacaat 240
 tccctactgt ctttgcattg tgtccacctc cccccagctc gag 283

<210> 1686
 <211> 187
 <212> DNA
 <213> Homo sapiens

<400> 1686
 gaattcgcgg cgcgctcgac ctggtggttg gggtcaggaa ggggaaagag gaagtacaaa 60
 taagcaacct ggacattttt attgtttttc tcttatctgt tagtctactt gaagagctat 120
 ccttgaaagt gagtgcctta gatctatgaa actgggcagc tatcatagat ctaaaacact 180
 cctcgag 187

<210> 1687
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1687
 gaattcgcgg cgcgctcgac aaaactcaca gataacaaca gatttttactg cagtcatctg 60
 agagctcgac gggattctct aaaaaagata gaaatctgga agttaccacc tgtgctttta 120
 gtgcatttga aacgtttttc ctacgatggc aggtggaaac aaaaattaca gacatctgtg 180
 gacttcccggt tagaaaaatct tgacttgtca cagtatgtta ttggtccaaa gaacaatttg 240
 aagaaatata atttgttttc tgtttcaaat cactacgggt ggctggatgg aggccacaaag 300
 ctcgag 306

<210> 1688
 <211> 376

<212> DNA

<213> Homo sapiens

<400> 1688

```

gaattcgcgg cgcgctcgac caaagcttcc aatagacctt tctctcccg tttttttaac 60
attgatttta tcgaggccag tctctttagg agtcaagagc ttgtagacac tgtccctgtt 120
tcagttggtc accgaaaata ctcaagcccc tcaacacccc ctcttctca tttagccaga 180
ttctgcttat tttaaacatt caacttccat cctccttcc cgtgactac ccaccacact 240
ctgttcattc gcttcaactc tcaattgcta ttgtactttt atgctgttcc acacgattta 300
ccagttactc ataatatgtc ttgtattatt aatggatatt ttacacattc tagcttgcat 360
cccccaaagc ctcgag                                     376

```

<210> 1689

<211> 359

<212> DNA

<213> Homo sapiens

<400> 1689

```

gaattcgcgg cgcgctcgac gacttgggac aagaagaaaa caagacatct tcacaaggaa 60
aaccaagtac taaaaaaagt atcctcccaa ctctgaagag atagaacaca aacatggccg 120
acagtggact tagggaacct caagaggact ctcaaaagga ttgggaaaat gatccatcag 180
taaattctca ggcgcaggag accacaatca tagcaagtaa tgctgaagaa gctgagatcc 240
tacactctgc ctgtgtgtct agcaaagacc accaagaggt agagacagaa ggtccagaaa 300
gtgcagatac aggtgataaa tcagaaagtc cagatgaagc aaatgtgggg gatctcgag 359

```

<210> 1690

<211> 130

<212> DNA

<213> Homo sapiens

<400> 1690

```

gaattcgcgg cgcgctcgac tcgattgaat tctagacctg cctcgagaaa tgccgatgga 60
aaaccagaga gagggcccctg cacataagaa gccccagcga gtgaccaga gagaaacagc 120
gggactcgag                                     130

```

<210> 1691

<211> 656

<212> DNA

<213> Homo sapiens

<400> 1691

```

gaattcgcgg cgcgctcgac tgtattagtc catttttatg ctgctgataa ggacataact 60
gaaactgggt aattttttaa gaaaaagagg tttaattggac tcacagttcc acatggctgg 120
ggaggcctca caatcacacc agaaggcaaa agccatgtct tacatggagg cagataagag 180
agaatgagaa ccaagcaaaa ggggtttcct cttataaaac catcagatct cgtgagactt 240
actcactacc atgagaatgg tatggggcaa cgcgcccat gattcaatca tctccactg 300
agtccatccc acaacacatg ggaactatgg gaactacaat tcaagatgag atttcaatgg 360
ggacacagtc aaacatata aacacatttt cttaaattatc agtcaaaaaa caaatcataa 420
taaacatata aatattttgt gctaaatgat aaatatcaca aaagttgtgt aatggagcaa 480
aagttgtata tagagaggtt tataccctaa aatgtctatg ttagaaaaga aggttgaaaa 540
tttaaaacat aggtattaga tacacagtag gaaaagagta aacccaaaga acatggagga 600
aaaagataat ataggaaagg ggagaaatca atgaagtaga aaacctctc cctata 656

```

<210> 1692

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1692

```

gaattcgcgg cgcgctcgac attaaagaat atcagaaaag tatatggaag gtgtatgtgg 60

```

tatcgtttac gggtattaaa accccagcca aatattatcc ctacagtaaa gaaaatagtt 120
 ctgcttcgag gatgggcatt gttcttattc cttgcatata aagtttccaa aacagaccga 180
 gaataccaag aatacaatcc ttatgaagta ttaaatttgg atcctggagc caatctcgag 240

<210> 1693

<211> 217

<212> DNA

<213> Homo sapiens

<400> 1693

gaattcgcgg ccgcgtcgac catactttta tggttttgta tttcgcattt aaatgtttga 60
 cactttttgaa atgttttccaa atggctatgc agttattcca acatcattta ctgaaactgtc 120
 ctataatttg gggtatcttc tttatcatat tccgaattac catagtagtt ggacattatt 180
 ctggattttc tattttgttt catgggcagc gctcgag 217

<210> 1694

<211> 304

<212> DNA

<213> Homo sapiens

<400> 1694

gaattcgcgg ccgcgtcgac tcgattgaat tctagacctg cctcgagggg gtaatgacac 60
 agttttttaaa agaggagaaa taatagatac tatagaggag aagggaaga aaatgaaaga 120
 gaggaataatg tggaagagag aaatagagag aaaaatttct taaaaatcag aggaataaat 180
 gggggccttc tataaggaaa tagattttat gagaataact taaaaataa atatagataa 240
 taataataat aaataccttt aaaggcagc taaaaaatg cattctctct ccattaccct 300
 actc 304

<210> 1695

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1695

gaattcgcgg ccgcgtcgac aataaacaac caaccacaaagt gataaatgga tagttaaggg 60
 aggttgtctg aacagggatt ataattagtt tacatacata ctctttaaag agataaatac 120
 attacacctt tcaaagaata aatgaaaaat agagagacat acctggctcc aaaacaaggc 180
 tgtatcttct gccactgtaa taaaatagat gcaattgagg ttcataaata aaagaataaa 240
 tacttaaacg tgaaagggtga ctaaatgcgg ggaagaaaga ttgcaataa atacatgggc 300
 caaagatggt tggtttgccc atggagtttt aattaaaaaa attaataagg aaaacaata 360
 cccaaaataa ggaagactga caaatgtgag ctcgag 396

<210> 1696

<211> 215

<212> DNA

<213> Homo sapiens

<400> 1696

gaattcgcgg ccgcgtcgac ggactaatcc ccttcgttgc tccaccactg gtcattgctga 60
 tgacaaaaac ttattatccc atattagctt ttactcagat ggcttatgga gccagtttcc 120
 tatctttctt ggggtgggac agatggggtt ttgctctacc agaaggtagt ccagccaaac 180
 cagactacct taatttagct agcagcgagc tcgag 215

<210> 1697

<211> 157

<212> DNA

<213> Homo sapiens

<400> 1697

gaattcgcgg ccgcgtcgac aggacaagcc cccaacgctt actaaattct gtgaaagcat 60

gtggagattc acattttatt tatgtatatatt ctgctatgga attagatttc tctggtcgtc 120
accttggttc tgggacatcc gacagtgcag gctcgag 157

<210> 1698
<211> 227
<212> DNA
<213> Homo sapiens

<400> 1698
gaattcgcgg ccgcgtcgac taaacattga tgaacttgat tatattttgg tgcagagctg 60
aactgcttta tcagatggga agttttgtct catgttccact aaatccaagt aagtttacc 120
tagaattatt aaaaacagag agaagttcta gtttcacgtc tttcacgctt ctgaacaaca 180
actttttgtg ctatctgttc tctgatttac acccaccaga actcgag 227

<210> 1699
<211> 148
<212> DNA
<213> Homo sapiens

<400> 1699
gaattcgcgg ccgcgtcgac ggggaataaa ccaagtgact gtgtacccta caaagatgaa 60
gaactttatg atcttccagc tccttgact cctttgtccc ttagttgcct tcagctcagt 120
actccagaaa atagagagag cgctcgag 148

<210> 1700
<211> 186
<212> DNA
<213> Homo sapiens

<400> 1700
gaattcgcgg ccgcgtcgac gttgattttt attcttcctt ctgccttcta tatcaagttg 60
gtgaagaaaag aacctatgaa atctgtacaa aagattgggg ctttggtctt cctgttaagt 120
gggtgtactgg tgatgaccgg aagcatggcc ttgattgttt tggattgggt acacaagcac 180
ctcgag 186

<210> 1701
<211> 205
<212> DNA
<213> Homo sapiens

<400> 1701
gaattcgcgg ccgcgtcgac caaaaggcgg tgtgaagtgt agtgtcatat aaaattaaga 60
aatgcagaga ttattttctg tggcactttt ttcccatctt tcttccatta gatccctagg 120
cagaattaaa ttgttttagta catccttaat tctctgtaaa caccactag cacctcctga 180
cctaaatctc ccagctcatc tcgag 205

<210> 1702
<211> 157
<212> DNA
<213> Homo sapiens

<400> 1702
gaattcgcgg ccgcgtcgac acatcaccct ctctgtgtgt taaattgaga tgggtggcact 60
ggctgtcttc tatattattg ctgcaccttt cctcaccagg ggtgcacaca aaactgggag 120
tgaagatgga atgagaagaa cagagaaaca actcgag 157

<210> 1703
<211> 443
<212> DNA
<213> Homo sapiens

<400> 1703
gagcatggtg gtgagcaggg acggtgcacc ggacggcggg atcgagcaaa tgggtctggc 60
catggagaca cggagggtcc tacgctcggg cggggggcag ctctcggggc tgctggtata 120
acctgcgcta cttcttcttc ttcgtctccc tcatccaatt cctcatcatc ctggggctcg 180
tgctcttcat ggtctatggc aacgtgcacg tgagcacaga gtccaacctg caggccaccg 240
agcgcggagc cgagggccta tacagtcaac tcctagggct caccggcctcc cagtccaact 300
tgaccaagga gctcaacttc accaccccg ccaaggatgc catcatgcag atgtggctga 360
atgctcgcgc cgacctggac cgcataatg ccagcttccg ccagtgccag ggtgaccggg 420
tcatctacgc gaacaatctc gag 443

<210> 1704
<211> 171
<212> DNA
<213> Homo sapiens

<400> 1704
gaattcgcgg ccgcgtcgac catgtggcct tcttcccttt gtattatttt cctttcgtgt 60
gtgatgaaga gcaagatgag acaggcctta ggatttgcca aggaagccag agagagccct 120
gacacccaag cctttttgac ctgtgcagag aaagaggaag aaaacctcga g 171

<210> 1705
<211> 188
<212> DNA
<213> Homo sapiens

<400> 1705
gaattcgcgg ccgcgtcgac ctcaaagaac acagtagcac ctaaatctgt tttcaattgg 60
gcttaaaaaat tgacatgcaa tctcttaagt tttttgttca gctacttcac actgagtacc 120
tcaaattctgc tctggagtcg attatgccac ctgtgtgtca ggatgcacct gaaagccccc 180
agctcgag 188

<210> 1706
<211> 317
<212> DNA
<213> Homo sapiens

<400> 1706
gaattcgcgg ccgcgtcgac cttgaagtca ttatcatctt gctgctcacc tttctccgga 60
agagaattct catcgcgatt gcactcatca aagaagccag cagggtgtgt ggatacgtca 120
tgtgtctctt gctctaccca ctggtcacct tcttcttctg gtgctctcgc atcgctact 180
gggccagcac tgctgtcttc ctgtccactt ccaacgaagc ggtctataag atctttgatg 240
acagcccctg cccatttact gcgaaaacct gcaaccaga gacctcccc tcctccaatg 300
agtcctcgat cctcgag 317

<210> 1707
<211> 169
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (45)

<220>
<221> unsure
<222> (123)

<220>
<221> unsure
<222> (126)

<220>

<221> unsure

<222> (150)

<400> 1707

```

gaattcgcg cgcgctcgac cccaaccaga tcggtgactc ctaanatctg agacaggaca 60
tcgtgactgc tggtagtaat atggtggtgc attgtttttt ccacccaaac ttaacatagc 120
ctnttnatac atttttatga aaaatttcan tgtcagctgc ctgctcgag 169

```

<210> 1708

<211> 116

<212> DNA

<213> Homo sapiens

<400> 1708

```

gaattcgcg cgcgctcgac ggactgtacc gtcctttaca aatgattctt atcaagtata 60
taatgtgttc agtactaact cttttcaact tctcactgtc aaacgtcccc ctcgag 116

```

<210> 1709

<211> 156

<212> DNA

<213> Homo sapiens

<400> 1709

```

gaattcgcg cgcgctcgac tatgcatttc cctacaatta cctgctggaa ttcccttggg 60
ttacctccca tcttccttat gtctctttac tctttacctc caaggcccca tcaccacaac 120
caaacaaacg gcattcgccc tcaccacggc ctcgag 156

```

<210> 1710

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1710

```

gaattcgcg cgcgctcgac ctaaagaatt agatgaagtc aggagcatat tgtgaattta 60
gttatacatg gcaactgggt tatgttcttt tcttcacctc aaacctcttc aaatcttcct 120
tctctccctt tgggaccatc atggatacca cctctgctct ggaaccttac cttctgttcc 180
agctgagtgt ggtctcacct tcttttgaac cccttgaact cgag 224

```

<210> 1711

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1711

```

gaattcgcg cgcgctcgac aggaatcgct ccagagggca aaaccgtcca actaacgtta 60
aggaaaacac aatcaaattt gagggtgact ttgatttcga gagtgcaa at gccagttca 120
accgagagga gcttgacaaa gaatttaaga agaaactgaa ttttaaagat gacaaggctg 180
agtagatggc tcgag 195

```

<210> 1712

<211> 243

<212> DNA

<213> Homo sapiens

<400> 1712

```

gaattcgcg cgcgctcgac acattataaa acagggggaa agcagactga cctctttttt 60
aaaagtttac cccctcttca actgaaccct aaagacactg tcatgaactg tgttgaatgg 120
tggaatcag tatttctgtt tgtggtgttg ttatttgta catctgtttc atgtctaggt 180
gttggtgggtg tggctgttga aggaagtgtg cagtcttgca gcttttatc cctgtgtctc 240

```

gag

243

<210> 1713

<211> 171

<212> DNA

<213> Homo sapiens

<400> 1713

```

gaattcgcgg ccgcgtcgac agggggggag attaaggtcc agagagggca agctgcttgc 60
cccgtgggga gttgggtcat agtcaggatg aattgaggcc ttcagctggc aggggtgcag 120
ccctaggctg gcctggctga caggctggat gggcatggct agtgtctcga g 171

```

<210> 1714

<211> 225

<212> DNA

<213> Homo sapiens

<400> 1714

```

gaattcgcgg ccgcgtcgac tgttggttact gtattacaat tagtattcta aaggcagaag 60
cagaagtagc tgcttttttag caatagaatt gtttcagtat tttgctgctg tttaatgcgc 120
atcttcagaa aacttcccag tggcttcaag gaatttgggg atctctctgg caacaaattg 180
tgaacatga aatttctgct gactttaata tatgaaacct tcgag 225

```

<210> 1715

<211> 162

<212> DNA

<213> Homo sapiens

<400> 1715

```

gaattcgcgg ccgcgtcgac gtgaaaactc atatctgaaa gattataaat atactttata 60
tcaattttcc agagaactta aacttctaata aatattggta atattctcat ggttactatt 120
ttatatctct tcctgctttt tgtagctact ggtgtactcg ag 162

```

<210> 1716

<211> 172

<212> DNA

<213> Homo sapiens

<400> 1716

```

gaattcgcgg ccgcgtcgac atataggaaa ctaagcattg tttttttttt aacaaatcta 60
aaaaagcact atgaactaca ggtgtttgac tttcaaaata ttttttgtat tgtaaatatc 120
ttcacattgt gtgaatactg gaagctgcag atctttgcta ggagcactcg ag 172

```

<210> 1717

<211> 146

<212> DNA

<213> Homo sapiens

<400> 1717

```

gaattcgcgg ccgcgtcgac gtttttcaca tactttgtct agtttatccc ccaaaataac 60
ctagtaaagt tgtatctcct tttatagata gtaaaattat gtttcataat ggtagattaa 120
cttgacaaat cctacgcgta ctcgag 146

```

<210> 1718

<211> 152

<212> DNA

<213> Homo sapiens

<400> 1718

```

gaattcgcgg ccgcgtcgac ctttttcttt ccttcccaat tccttgcaact ctaaccagtt 60

```

cttggatgca tcttcttcct tccctttcct cttgctgttt ccttcctgtg ttgttttgtt 120
gcccacatcc tgttttcacc cctgaactcg ag 152

<210> 1719
<211> 245
<212> DNA
<213> Homo sapiens

<400> 1719
gaattcgcgg ccgcgtcgac ggtgcctctc tagcctgcac aaatgattga caagagatca 60
cccaaaggat tattcttgaa ggtgtttttt ttctttattt tttttttttt tttttttttc 120
ttttttcttt tttttttgca catgacagt tttgtattga ggacctcca aggaagaggg 180
atgctgtagc agtgggtgctt ggggtgcctgg cctccagtgt cccacctcct tcaccacccc 240
tcgag 245

<210> 1720
<211> 198
<212> DNA
<213> Homo sapiens

<400> 1720
gaattcgcgg ccgcgtcgac ccactcacca ccaagaaata attagattct gtagacaaaa 60
tatatagtaa tttctctgta ccagagcagt tcttaaata ctgtttgaat gttgtttctg 120
gtgggggttt ttctctttct gatttgtcat tttaaagggt tagacttagc cactgaggag 180
gtggccagcc gactcgag 198

<210> 1721
<211> 212
<212> DNA
<213> Homo sapiens

<400> 1721
gaattcgcgg ccgcgtcgac gaaataatgc aatttctaata tatctggatg ttcggttgaaa 60
atatattaga cattctccct gaggttaaaa acaaaaagta cgtgaccagt ctggtaagaa 120
gtattaatga agtagctaata attacagctt cattttctac tagcacctat cataatgggc 180
ttagtcattt cacacaaatc agaacactcg ag 212

<210> 1722
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1722
gaattcgcgg ccgcgtcgac gctctatgca atcatgtatg tttatttttc ttttgttgct 60
tgtgctttta gggtcatatg caagaagtga tacaacctg aaacctaggc cagtgtcatg 120
gagtttttca cctgtgtttt cttctactgg ctttacagtt tcaggcctta caattaagcc 180
cttgtctatt ttgaatggat ttttgtgtag ggacattccc tccacaaggg cttcctctgg 240
ccttgcctgat gctcctccgt ctcccttctg tccctctccac tccacctctt tcatgtggaa 300
gaacccttgg catcctcgtg tggcctctct gtccctatcca gcccccatg gtgacctcac 360
acttgccctt ctgacgtggg tctctctccc aaacctctt ccaggtcctc tcgag 415

<210> 1723
<211> 252
<212> DNA
<213> Homo sapiens

<400> 1723
gaattcgcgg ccgcgtcgac gtttctatgc ttcattggtat ttcagggtgtt tcggaacatc 60
agtgggaagc agtccagcct gccagctatg agcaaaagtc ggcggctaca ctatgagggg 120
ctaattttta ggttcaagtt cctcatgctt atcaccttgg cctgcgctgc catgactgtc 180

atctttcttca tcgttagtca ggtaacggaa ggccattgga aatggggcgg catcacagtc 240
caagtgcctcg ag 252

<210> 1724
<211> 228
<212> DNA
<213> Homo sapiens

<400> 1724
gaattcgcgg ccgcgtcgac ggggaatttg gcataatata ctttggctct ttgtgtctcc 60
tcatacactct gaatcaggat ctttccaatt cgtatggatc gacagcagtc tcgtaaacct 120
tgttccattg cctcaccgct tctcattatg ctgacccac aatttccctt ctcaaatttc 180
actccttcat acttgtaccc tgttgagtg gtcacatgc tactcgag 228

<210> 1725
<211> 257
<212> DNA
<213> Homo sapiens

<400> 1725
gaattcgcgg ccgcgtcgac gaccatcttc atccttccat gtaccctcca tttgtctccc 60
cacttcactc cctccctctt ttgttttctt tccccctctt cttttcttcc attcactatc 120
aggaagggca acctgtggag gccccagtc gcccacccc gagccaacag ggactagagg 180
cagcagcggc tgcaacagtg agtgaattaa aaccaacaaa ccatcacatt tcatttaaag 240
aggtggcgca cctcgag 257

<210> 1726
<211> 183
<212> DNA
<213> Homo sapiens

<400> 1726
gaattcgcgg ccgcgtcgac gaaaacagtg atgttccact tgtttgtttt tagcctactt 60
ccctttatgc tccccgctcc tgaaggatct cccgagttag cagggcctca tgtggatccc 120
cagggccggg gatctttgtc cagtgtccca gccccagcc caccctgcc caacactctc 180
gag 183

<210> 1727
<211> 137
<212> DNA
<213> Homo sapiens

<400> 1727
gaattcgcgg ccgcgtcgac acctgcccga gacgttattc aaagatgaat gagaaagttc 60
tattcttttt catcatttgt gtgatcaggt tgcaaaggac atgtcttttc ctcgatgaaa 120
ctgatgtctc actcgag 137

<210> 1728
<211> 198
<212> DNA
<213> Homo sapiens

<400> 1728
gaattcgcgg ccgcgtcgac taaaccgtcg attgaattct agacctgcct cgagccgggg 60
ggagctgcta agatgggttt gaactataat gctggcatcg gcattactca gatctttttt 120
gtttttttga tacagagttt cgctcttggt gcccaggctg gagtgcaatg gcacgatctc 180
ggctcaccac atctcgag 198

<210> 1729
<211> 302

<212> DNA

<213> Homo sapiens

<400> 1729

```

gaattcgcgg ccgcgctcgac aaaacttcga gactcagatt gttgcgtctg atcacacata 60
ttataactca aaactagagc catctggcaa aaataagaat cgatcaaaga tttcaaacia 120
agatcagtca aacaaaccag taaaaacttc agcgtcgagc agagttgaaa ctcatcagag 180
tgaagttgct cagtcatttt caggggaaaa agctaataca aaaactcaaa gaagccaaac 240
tcagaccatt ttagcaaatg ctgatacatc cactcctaca gattgttccc ctaacactcg 300
ag                                                    302

```

<210> 1730

<211> 255

<212> DNA

<213> Homo sapiens

<400> 1730

```

gaattcgcgg ccgcgctcgac tgcaaaagga gatcacaccc ttgccccgct gagccccgtg 60
ataacaagtc actccagact aacctgtgtg ccagacattt gtgcattgtt gcacttttgag 120
gttattattt atcaagttct tgaaggaagc agaaagaggg actcctctct ccctccgtgt 180
atagtcctta tgtttgtgct agtttttctt ttttttctct gtgtccagtc agccacaggg 240
cccgcacccc tcgag                                                    255

```

<210> 1731

<211> 243

<212> DNA

<213> Homo sapiens

<400> 1731

```

gaattcgcgg ccgcgctcgac ctttttggga attaaatcct tagtctacat gttggcagca 60
tctttacttg gcctgggttt gcacccaatt tctggacatt ttatagctga gcattacatg 120
ttcttaaagg gtcagtgaac ttactcatat tatgggcctc tgaatttact taccttcaat 180
gtgggttatc ataatgaaca tcatgatttc cccaacattc ctggaaaaag tcttcacttc 240
gag                                                    243

```

<210> 1732

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1732

```

gaattcgcgg ccgcgctcgac gaaattacag tttgtatctg tttcttagta ggtgtggcct 60
ttaaaatagtg tgcattattca ttgttaaatt ccagaataat agagtaatac ttaatactgt 120
acattccccc ttacgtatat tttattaaaa tttataagca agaaattata cataagtggg 180
catgatctta gggagacttc tcgag                                                    205

```

<210> 1733

<211> 115

<212> DNA

<213> Homo sapiens

<400> 1733

```

gaattcgcgg ccgcgctcgac ggatgcagtg gctattcaca ggcgcgatcc cactactgat 60
cagcacggga gttttgacct gtcctgtttc cgacctgggc cggtcacccc tcgag 115

```

<210> 1734

<211> 484

<212> DNA

<213> Homo sapiens

<400> 1734

```

gaattcgcgg cgcgctcgac agcaagtccc acgcacagtc ctgaaaaaaa ttttaattctt 60
cttttcttag aactatcttg gttggcatca tcaggccctg agagcacagt gcatgtcagc 120
atctaagatt ccacttttca aaatgaagga cctgatactg atcctatgcc tcctggaaat 180
gagttttgca gtgccgttct tctctcagca atctggaaca cggggtatgg ctagtttgag 240
ccttgagaca atgagacagt tgggaagtct gcagagatta aacacacttt ctcagtattc 300
tagatacggc tttggaaaat catttaattc tttgtggatg cacgggtctcc tcccaccaca 360
ttcctctctt ccatggatga ggccaagaga acatgaaact caacagtatg aatattcttt 420
gcctgtgcat cccccacctc tcccatcaca gccatccttg aagcctcaac agccagggct 480
cgag
484

```

<210> 1735

<211> 278

<212> DNA

<213> Homo sapiens

<400> 1735

```

gaattcgcgg cgcgctcgac cctaaacat cacaatagtc tgttgtatgg catccccctcc 60
atcttgaaat gtccctctccc tcagttccca tatgttatca cacatgcctg ccttggtctc 120
tccctctagt tgttccttct ctgtcttctg tgggcttctt attgtctgct cactccttct 180
tcagtgtcct cacatggggt tccttccctt ctacgtgat gccatcacct ggggaatcac 240
agttactcag cagcactggg gcctctccat ctctcgag
278

```

<210> 1736

<211> 197

<212> DNA

<213> Homo sapiens

<400> 1736

```

gaattcgcgg cgcgctcgac gatctatctt aggtggacaa agccatggaa tttgctatgc 60
ctaagtcctt cagggtcata gctgaaagaa gtatgcattc atggtacgtt tgttttttaa 120
tatgttttat tctgcatatt agtatcacat tacacagttt ggtcatggta tttgtaacct 180
ggagagaaca tctcgag
197

```

<210> 1737

<211> 424

<212> DNA

<213> Homo sapiens

<400> 1737

```

gaattcgcgg cgcgctcgac cattttggag ccactgaatg gactggtgat gagacgaagc 60
aacctttaat tgggaccatg cttctccagt acattcgctt gtattccatg gtgtaaaccc 120
ggccttacgc gtggctccga ccttcggttg aaatgcattt gcgtagcacc acccaggggc 180
tcccttgctt tggctagagc ctcataaaag accccaggtt ttgcgaagga ttttgaacac 240
cagcgtcttt taacatgtgg aactttcggg tttggttttag ctctgtgaac gtatttaaaa 300
cttgctacat tattccacag tgaaagtggg aaccttttta agagttatca tagagtgcct 360
tttaacatct gtcataattt ctataaacia cttttcagtg agaagcgtat atagtgtact 420
cgag
424

```

<210> 1738

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1738

```

gaattcgcgg cgcgctcgac cttcatgtgt ataacattac tgattgccag cctcatctgc 60
cttactttac cagtatttgc tggccgttgg ttaatgtcgt tttggacggg gactgccaaa 120
atccatgagc tctacacagc tgcttggtgt ctctatgttt gctggctaac cataagggct 180
gtgacgggtga tgggtggcat gatgcctcag ggacgcagag tgatcttcca gaaggttaaa 240
gagtggtctc tcatgatcat gaagactttg atagttgcgg tgctgttggc tggagtgtgc 300

```

cctctccttc tggggctcct gtttgagctg gtcattgtgg ctccccctgag ggttccccctg 360
 gatcagactc ctcttttttta tccatggcag gactgggcac ttggagtccct gcatgccaaa 420
 atcattgcag cgctcgag 438

<210> 1739
 <211> 423
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (34)

<400> 1739
 gaattcgcgg ccgcgtcgac cgcgcccgcg tcgncccaac acccgactct attggtgcat 60
 ttaaaatgtg attccatttt ttcttacaat tcttcagggg acttacctgc attaagttag 120
 gttaaatgca ttcaggaggt tgtttcttct atctagtttt agaataatat ttcttcggca 180
 aaccttgcta actgctgggt acccttgaaa acgttaatct gaggactttt tccaccaact 240
 cattaatgat ggtggaagca agtgatttat ttgtttctct gagaatttga tgaagagcag 300
 tcttctctct ctgcccttta ctaagcaaaa cctggagcag tttaaatagg ctaaattggt 360
 ttgattaaat cttgagctcc gagtgggaag gagaaaatga gaagttaacc cctttccctc 420
 gag 423

<210> 1740
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 1740
 gaattcgcgg ccgcgtcgac cttttgcagt acagcagggg tgctgatcac caaggccctt 60
 ttctctggcc tggatatgct gtgattatgt ttgtcccggt tcctgtgtat tagacatgga 120
 agctccccct gccacactcc acccccaatc ttcccttccc ttccggcagg gaggccctc 180
 tccataagac gcttacgttt ggacaatcaa ggtgcacagt tgtaagttag cacaggcata 240
 caccttgagc attaatgtgc ataaccactt tgcttcgag 279

<210> 1741
 <211> 158
 <212> DNA
 <213> Homo sapiens

<400> 1741
 gaattcgcgg ccgcgtcgac tttctttaga aagttgtaga ttccagggtt gagattttat 60
 tttatttaac ttgatttttg taagcattta gtaactaact gtaaataatcc ctcaagcttt 120
 ttcttctctgt tttgaaacaa atgcgtttta tactcgag 158

<210> 1742
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 1742
 gaattcgcgg ccgcgtcgac caggcaccct tgcacagggg tgcatttctt tagtcttctg 60
 tgggtctttt gatgtgggtt tgattttgct ttgtcttttc tagctgagat ttcccaaggg 120
 catcctcaga agctctgggt gtgccagagg acccccagaa ctaagaaggg agggcgagtg 180
 ggtctccatt ccccgagaag ccaggggcag ggtgggatgg ggaagaccag gagcagagtc 240
 gagcctcaca gaagccagcg cgggtctctg ctacagaccc cagccggggc tctggacca 300
 gggtaacagc ccagttcat cccaaccct ctacagaccc caagaggggt agctcggctg 360
 ccggaagaga ggggtgcct atccctggca acccctccac gtagcgtacc ccagcacctg 420
 ccaccgcctt tgccatttct cgag 444

<210> 1743

<211> 225

<212> DNA

<213> Homo sapiens

<400> 1743

```

gaattcgcgg cgcgctcgac tgctgctcca ctacagagga aacttcaaga aatgctggtt 60
tgctacagtg ttttagcttg tgagattctc tgggaccttc cctgctccat catgggggtca 120
cctctagggtc attttacctg ggacaaatac ctaaaagaaa catgttcagt cccagcgcct 180
gtccattgct tcaagcagtc ctacacacct ccaagctcac tcgag 225

```

<210> 1744

<211> 274

<212> DNA

<213> Homo sapiens

<400> 1744

```

gaattcgcgg cgcgctcgac gcaaaatgat ccctgggtcaa gatctgttgc ccaagatggt 60
acaggtcaca atgaccacat ttgaaattgt tttcccttcc attttaccct gtgaaagcat 120
ctctcctaga gccctgcaaag aggcagggtga cattgtgtcc atatttcttc ctgtttcaga 180
acttctgttt cacaacaatt tctctctcgc tacaagtatt ctttactca gcaactgggga 240
agttgggaac agctgggtcac caccatccct cgag 274

```

<210> 1745

<211> 276

<212> DNA

<213> Homo sapiens

<400> 1745

```

gaattcgcgg cgcgctcgac caggatgccca ccttgactac aactactttc caaaatgaag 60
atgaaaagaa taaagaagta tatatgactc cactcagggg tgtaaaagca acccaagcat 120
caaagtctac tcagctaaag actaacagag gacagagaaa agtgacagtt tcagctagga 180
cgaacaggag gtgtcagact gctgaagccg actctgaaag tgatcatgaa gttccagaac 240
cagaatcaga aatgaagatg agactaccaa ctcgag 276

```

<210> 1746

<211> 144

<212> DNA

<213> Homo sapiens

<400> 1746

```

gaattcgcgg cgcgctcgac ttttaagttgc catttgggga ataattgcag tatgtgtaga 60
gactctcttg ggatgcactt atatttttat ttaatgacta cttgttttct agttttgccc 120
acaacgtctg aaaccacact cgag 144

```

<210> 1747

<211> 165

<212> DNA

<213> Homo sapiens

<400> 1747

```

gaattcgcgg cgcgctcgac ccacgagtta gcacaagtgt attcaaccaa caaccctca 60
gaactccgaa acctgggtgaa taagcacagt gaaaccttca ctcgcgataa caacatgggg 120
ctggtgaagc aatgcttgtc atctctttat aagaagaatc tcgag 165

```

<210> 1748

<211> 212

<212> DNA

<213> Homo sapiens

<400> 1748

gaattcgcgg ccgcgtcgac cgtttttcct aacaggctac tccttcctgt agagcagaaa 60
 ttgtattttg cacgaacatg cagttattga agattaggat caaggataga caaggtatag 120
 tagttatctt aaaatataca ctccctaagca gtattatttt aaaatccttt accctggcta 180
 cctccctac ccgggttccc ctcccactcg ag 212

<210> 1749

<211> 186

<212> DNA

<213> Homo sapiens

<400> 1749

gaattcgcgg ccgcgtcgac tggacccag atgcttgtct tcctgagagt gattggagg 60
 ctcttggctt tggctgctgt gttccagatc atctccctgg taatttacc cgtgaagtac 120
 acccagacct tcacccttca tgccaacct gctgtcactt acatctataa ctgggcca 180
 ctcgag 186

<210> 1750

<211> 303

<212> DNA

<213> Homo sapiens

<400> 1750

gaattcgcgg ccgcgtcgac cacaaaataa tctacaaact tgattctctc ttgttctctg 60
 agtgtacttc ccaccgtcct tttaatcttt agatctaate tcaagcagaa atttctctac 120
 aaaccttttc cacatcttcc taagtcaaag cccgcattta tagattctca tagaaccatg 180
 tataggtttg cggcacttgt cctgttaagt gtgaatctaa tcaagggcaa atggtgataa 240
 aggcctcaca ttgctgctct gttttacaac tctagtaatt tttacctgac aaaaacactc 300
 gag 303

<210> 1751

<211> 243

<212> DNA

<213> Homo sapiens

<400> 1751

gaattcgcgg ccgcgtcgac gattgaattc tggaccagcc gtgcaaatct ctagaagatg 60
 acggtgttct ttaaaacgct tcgaaatcac tggaaagaaa ctacagctgg gctctgcctg 120
 ctgacctggg gaggccattg gctctatgga aaacactgtg ataacctcct aaggagagca 180
 gcctgtcaag aagctcaggt gtttggcaat caactcattc ctcccaatgc acaataactc 240
 gag 243

<210> 1752

<211> 256

<212> DNA

<213> Homo sapiens

<400> 1752

gaattcgcgg ccgcgtcgac cgaagaatt gatgggtgatg atgaaggcgc tgtgtcttgg 60
 cgtgttctcc tacgtgaagg tggcagccag ctccctgctg catggcgggg gccggccggc 120
 attgctggca gccggcgtgg ccattccaggt gggtctctctg ctggcgctg ttgctatgtt 180
 ccccccagacc agcatctatc acgtgttcca cagcagaaag gactgtgcag acccctgtga 240
 cccattgaac ctcgag 256

<210> 1753

<211> 211

<212> DNA

<213> Homo sapiens

<400> 1753

```

gaattcgcgg ccgcgtcgac ctgtatttca gagtaaaatc tcctaaagga aataaaaaca 60
cagagtttga atacacatgc ttgcaaaaac attagtcgtg aaatccctag caacaagtca 120
ctggattttt ctctgtcagc acgcgtgtca gctgccaaag aatagactta atgaagaagt 180
gcccacatgc tggcaggggc cccactcga g                                     211

```

<210> 1754

<211> 263

<212> DNA

<213> Homo sapiens

<400> 1754

```

gaattcgcgg ccgcgtcgac atttatttgt tgtatttaaa aaatacattg ttgtaagagt 60
gattttttca atatatattta ttccctggggg ggatcatgct acactctcaa aagaaaatta 120
agaaatcatt cagatcatcc ccccttttta agtagtgtga attgcaaac ccaacatatt 180
ttttttactg tcagttgcgg tttatttatt ctttaactgt ctggtttagt agtttaatga 240
ttatgaaaaa tgtatctctc gag                                     263

```

<210> 1755

<211> 150

<212> DNA

<213> Homo sapiens

<400> 1755

```

gaattcgcgg ccgcgtcgac ctgatacctg cctcatagag ttatgaggat taagtgtctc 60
ctacctttga atgtcttgcct ccggtgtttc cctggagata tcttgtccaa gtatgaacag 120
cagtgttggc cacaaactca tcagctcgag                                     150

```

<210> 1756

<211> 257

<212> DNA

<213> Homo sapiens

<400> 1756

```

gaattcgcgg ccgcgtcgac tccagctcta tttaaaaagt aaagacaccc accgactcct 60
gatccccctc tttttctatg gagaacgttg ccttatactc tctacttcag atgatgaaca 120
ctgtgtactg tgtgtgcttt aaagaagttt tatttaattg ctcccttctt cctttccttg 180
ttattcacct ccctgatgcc tgctttcagt tgagggttgg gggcaatgat gagcatatga 240
attttttccc actcgag                                     257

```

<210> 1757

<211> 237

<212> DNA

<213> Homo sapiens

<400> 1757

```

gaattcgcgg ccgcgtcgac ggagtcacc gcgcaagcgc atcctggcct ttcttcagtc 60
cccacgtgcg atccttcccc gcaacttttt cgagaaaaat gcccaaatc aaggcgggccc 120
gtggggtggg gggtcaggaa aaacatgcgc ccctggccga tcagatcctg gctgggaatg 180
cgggtgcgggc gggggtccgg gagaagcggc ggggtcgcgg gacaggtgaa cctcgag 237

```

<210> 1758

<211> 171

<212> DNA

<213> Homo sapiens

<400> 1758

```

gaattcgcgg ccgcgtcgac acgaaaacgg atgatcttga gcactatttc atggatggga 60
ggaaaaaatc catttttggg gattgcttac atcgctgttg gatccatctc cttccttctg 120
ggagttgtac tgctagtaat taatcataaa tatagaaaca gtagtctcga g 171

```

<210> 1759
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 1759
 gaattcgcgg ccgcgtcgac cagagttttc cgagtgcact tcttgatgct ggctgtttct 60
 ctcaccgttc ccttgccttg agccatgatg ctgctggaat ctctataga tccacagcct 120
 ctcagcttca aagaaccccc gctcttgctt ggtgttctgc atccaaatac gaagctgcga 180
 caggcagaaa ggctgtttga aaatcaactt gttggaccgg agtccatagc acatattggg 240
 gatgtgatgt ttactgggac agcagatggc cgggtcgtaa aacttgaaaa tggtgaaata 300
 gagaccattg cccggttttg ttcgggccct tgcaaaaccc gagatgatga gcctgtgtgt 360
 gggagacccc tgggtatccg tgcagggcc aatgggactc tctttgtggc cgatgcatac 420
 aagggaactat ttgaagtaaa tccctggaaa cgtgaagtga aactgctgct gtcctccgag 480
 acaccattg aggggaagaa catgtccttt gtgaatgatc ttacagtcac tcaggatggg 540
 aggaagattt atttcaccga ttctagcagc aatggcaac tcgag 585

<210> 1760
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 1760
 gaattcgcgg ccgcgtcgac tccgcttgga tattcgcatg ggcctacttt acatcacact 60
 ctgcatagtg ttcttgatga cgtgcaaac cccctatat atgggccctg agtatatcaa 120
 gtacttcaat gataaaacca ttgatgagga actagaacgg gacaagaggg tcacttggat 180
 tgtggagttc tttccaatt ggtctaata ctgccaatca tttgcccta tctatgctga 240
 cctctccctt aaatacaact gttcagggtc cgag 274

<210> 1761
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1761
 gaattcgcgg ccgcgtcgac gagacatgaa ggttttagcc actagttttg tccttgggag 60
 cctgggggtg gccttctacc tgcctttggt ggtgactaca cctaaaacac tggccatccc 120
 tgagaagctg caagaagctg tggggaaaagt tatcatcaat gccacaacct gtactgtcac 180
 ctgtggcctt ggctataagg aggagaccgt ctgtgaggtg ggccttgatg gaggtagaag 240
 gaaatgtcag actcggcgct tagaatgtct gaccaactgg atctgtggga tgctccattt 300
 caccattctc attggcaagg aatttgagct tagctgtctg agttcagaca tcttgagatt 360
 tggacaggaa gctttccggt tcacctgtga ctcactcgag 400

<210> 1762
 <211> 226
 <212> DNA
 <213> Homo sapiens

<400> 1762
 gaattcgcgg ccgcgtcgac ccaagccctg tgcagttgaa aatctgaata taggccacca 60
 cacctggcct cgtttccttc atagttatat gttacctagt tttttgtttt gttttattta 120
 tttatttgag acagggtctc actctattgc actccagcct gggcaacaag agcaaaactc 180
 agtctcaaat aataataata acaacaactt aatgtgccag ctcgag 226

<210> 1763
 <211> 184
 <212> DNA
 <213> Homo sapiens

<400> 1763

```

gaattcgcgg ccgcgtcgac gccttcccag caagaaagaa cgatctggga agtcccaccg 60
gcacaaaaag aaaaagaagc acaaaaaatc cagcaaacac aaacgtaaac acaaggctga 120
cacagaagag aaaagctcta aggcagagtc aggggagaaa tctaagaagc gcaagaaact 180
cgag 184

```

<210> 1764

<211> 519

<212> DNA

<213> Homo sapiens

<400> 1764

```

gaattcgcgg ccgcgtcgac caagatgttg acagctcttg tgctcatttg gattttctcc 60
ttgtccttat ctgaaagcca tgcggcatcc aacgatccac gcaactttgt ccctaacaaa 120
atgtggaagg gattagtcaa gaggaatgca tctgtggaaa cagttgataa taaaacgtct 180
gaggatgtaa ccatgggcagc agcttctctc gtcacattga ccaaaggagc ttcggcagcc 240
cacctcaact ctatggaagt cacaacagag gacacaagca ggacagatgt gagtgaacca 300
gcaacttcag gagttgcagc tgatgggttg acctccattg ctcccacggc tgtggcctcc 360
agtacgactg cggcctccat tacgactgcg gcctccagta tgactgtggc ctccagtgtc 420
cccacgactg cagcctccag tacaactgtg gcctccattg ctcccacgac tgcagcctcc 480
agtatgactg cggcctccag cactcccatg acactcgag 519

```

<210> 1765

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1765

```

gaattcgcgg ccgcgtcgac ggaaaatatg ctgctttggt tgatattttt caccctggg 60
tggaacctca ttgatggatc tgaaatggaa tgggatttta tggggcactt gagaaaggta 120
ccccggattg tcagtgaag gactttccat ctcaccagcc ccgcatttga ggcagatgct 180
aagatgatgg taaatacagt gtgtggcatc gaatgccaga aagaactccc aactcccagc 240
ctttctgaat tggaggatta tctttccat gagactgtct ttgagaatgg caccggaacc 300
aagctcgag 309

```

<210> 1766

<211> 201

<212> DNA

<213> Homo sapiens

<400> 1766

```

gaattcgcgg ccgcgtcgac ggggtttaga aattcattta taactgggtc tctgatgtgg 60
gaaatcctga tcttgtcccg ggttctttgc tacttccttg aaaatactct agcttcatgc 120
tggttcaagg tggtttacct ggtatgaccc cctccccgc cctcgccca tcccagggtg 180
gtgccacacc cagtactcga g 201

```

<210> 1767

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1767

```

gaattcgcgg ccgcgtcgac gtggcgcac tttatcttgg tttccacgag cagacgctga 60
agccatgatg accttgtgct tgctctcctt ccagttgttt atcctctgct tactccttga 120
ccagtgctct gtgtggtctg ggtcgcctcc gaggccgagt cctcgttgc caagcccagc 180
aggcctcgct cccccgcgac tcgag 205

```

<210> 1768

<211> 215

<212> DNA

<213> Homo sapiens

<220>
<221> unsure
<222> (87)

<220>
<221> unsure
<222> (103)

<220>
<221> unsure
<222> (166)

<400> 1768
gaattcgcgg ccgcgtcgac tcttgaaaga atttttttcg ttattttttac atctaacaaa 60
gtaaaaaaat taaaaagagg gtaaganacg attccgggtgg gangattttta acatgcaaaa 120
tgtccccggg ggtttcttct ttgcttgett tcttcctcct taccnacc cccactcact 180
cacacacaca cacacacaca cacacatcgc tcgag 215

<210> 1769
<211> 167
<212> DNA
<213> Homo sapiens

<400> 1769
gaattcgcgg ccgcgtcgac cccatgtact ggggaagcac agccaactac ctgggctggg 60
ccatcatgca cgccagcccc acgggcctgc tcttgacggt gctggtggcc ctcacctaca 120
taatggctct cctatacgaa gagcccttca ccgctgacta tctcgag 167

<210> 1770
<211> 182
<212> DNA
<213> Homo sapiens

<400> 1770
gaattcgcgg ccgcgtcgac cttatgtttg ccgtttattc ccttcacaga aggcttggaa 60
tgtatttatt tatatttatt ttttcaaaat ccgaaatcat ttgcgagccg caatcgctcg 120
ctgcctgtgt gggggggccc agggcctgcc ttgcacgttg cagcctctct ggccctctcg 180
ag 182

<210> 1771
<211> 468
<212> DNA
<213> Homo sapiens

<400> 1771
gaattcgcgg ccgcgtcgac tagcaatcga tgttgctttc ctacccatgt attgtccaga 60
agatattcga acatctcaaa tagacacact gttgacctcc atgaattaca gctgtgcata 120
tccacaggac acaactggaa atgaccgatt gccaggctcc agagcgggtg cagggtgatat 180
tataaaaagca gcaactgaac tggatagagt gcatacgtc ggtatcttgg atatctgtaa 240
tttgggtaat aataaagtgg aagtctatct gcacaagatt tatagtccag agaatacttc 300
ttaaagttta gcaaatgaaa ttattacaga ttatacagat gtactgcttt aaagatatct 360
catcattttg ctggtaattt cagtaactgt tttcagcaag aatattacat gagctctaaa 420
gttattaagc agttttatgt tcgttttctg tttagggaag ctctcgag 468

<210> 1772
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1772

```

gaattcgcgg ccgcgtcgac tctactcaca taggcctaca tttttactta atatagattt 60
cgccatactt tcccaccagg tctgaagtta accactacag ttcacatttt ctgtttgttt 120
attttgtttt gtttttagag acaggatttt tctctgttac agaggctgga gtgcagtgtc 180
accatcatag ctcaagcaat actcctctct cagtctctag agtagctggg atgacagacg 240
tgcaccacca tgcctggcta attttttttg tagagatggg gtctctctat gttgcctggg 300
cttgtctcaa actcctggct tccagcaatc tcccacccc tctcgag 347

```

<210> 1773

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1773

```

gaattcgcgg ccgcgtcgac ctttcttctc tgatatcttt tggtaaaata tttgttacia 60
taaccaagga gacaactttg agtaaatctc ccattatttt tgaagcctgt tgccccttct 120
gccagggaga aacttcaccg cctgggtcca tatactttca ctaattaact gagcaccagg 180
ttcctggaga aacatattta ttaaatgtca aaaatttggg gacatttagt cttcattttt 240
ggtcttctgt gtccagtggc atttttccta aattatgtcc agcatctcct cgag 294

```

<210> 1774

<211> 267

<212> DNA

<213> Homo sapiens

<400> 1774

```

gaattcgcgg ccgcgtcgac gtccctggca ttttaggtgt cggttgggta ggcagtcatt 60
gattcaggtta tgcagtgtgt tgagccaagt cggcagtttg taaaggactc cattcggctg 120
gttaaaagat gcactaaacc tgatagaaaa gaattccaga agattgccat ggcaacagca 180
ataggatttg ctataatggg attcattggc ttctttgtga aattgatcca tattcctatt 240
aataacatca ttgttgggtca gctcgag 267

```

<210> 1775

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1775

```

gaattcgcgg ccgcgtcgac cttaaagcaa actaagacca gagggaggat tatccttgac 60
ctttgaagac caaaactaaa ctgaaattta aaatgttctt cggggggagaa gggagcttga 120
cttacctttt ggtaataatt tgcttcctga cactaaggct gtctgctagt cagaattgcc 180
tcaaaaagag tctagaagat gttgtcattg acatccagtc atctcttctt aaggatctcg 240
ag 242

```

<210> 1776

<211> 243

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (22)

<400> 1776

```

gaattcgcgg ccgcgtcgac gnaccccatc aaacaccaag aacagatata cccactccta 60
agaaacatta taggaatagt tcagattttc ttctgttaaa tgtcatccat cagctcacc 120
gatttttttc agcagacctc ctcttctatc ttgtgtgttg ctttatatgt cgctcttgac 180
agctgctact atttatgcat gcatttctat agcaaaacct tgattaactg ggacacgctc 240
gag 243

```

<210> 1777

<211> 208

<212> DNA

<213> Homo sapiens

<400> 1777

```
gaattcgcgg ccgcgtcgac ctagaatgtg gccaggcaga ataatgacag tgactgtggt 60
gcttttgtgt tgcagtactg caagcatctg gccctgtctc agccattcag cttcaccag 120
caggacatgc ccaaacttcg tcggcagatc tacaaggagc tgtgtcactg caaactcact 180
gtgtgagcct cgtaccccgga ccctcgag 208
```

<210> 1778

<211> 219

<212> DNA

<213> Homo sapiens

<400> 1778

```
gaattcgcgg ccgcgtcgac gtcacacaga tgcccacacc cctgtctctg cctgaatctg 60
tggttgagac tagcttgggg gaccactctt ggctgtgcc actgctccat ccctgggcca 120
ggccagcagc ctccagcact ggggtgggagc tgaagccata tggcattcaa cctcccagat 180
tccaggctaa ctgcgaaatc ccgtgtggga ggactcgag 219
```

<210> 1779

<211> 194

<212> DNA

<213> Homo sapiens

<400> 1779

```
gaattcgcgg ccgcgtcgac tttatctgct ctgtcatata tttactaatt gtatggctgg 60
gaccaaata catgaggaat aaacagccat tctcttgccg ggggatttta gtggtgtata 120
accttgagact cacactgctg tctctgtata tgttctgtga gttagtaaca ggagtatggg 180
aaggcaaaact cgag 194
```

<210> 1780

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1780

```
gaattcgcgg ccgcgtcgac cttttgctct ccggaattta agcacggggg cagcacattc 60
agaaggtttt tctgttcagg aacagtttagc tactgggtgga attctgtggt ttcttgacct 120
cactgcaccc gactccactt ggattctgcc tatctctgtt ggcgtcatca atttgtaaat 180
agtggagatt tgtgctctac aaaaaatttg aatgtctcgt tttcagacgt atattacgta 240
ctttgtccgt gcaatgtcgg tggtgatgat accaattgct gcaacggtac cctcatcaat 300
tggtctctac tggttatgct ccagcttcgt gggcgggactc gag 343
```

<210> 1781

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1781

```
gaattcgcgg ccgcgtcgac ctaaagtgcc tttagcaaca gttacagtaa ttgatcaatc 60
agaaactaag aagaaggttt ttctgtggag gactgcagca ttttgggcat ttacagtgtt 120
tcttggagat ataattttac tcacagtcct agctttcaga atgctctcct tgaaatttct 180
cgtctgttcc ttttttctga agaacatgca tcctgaatgt tggatcatga aaagtcttga 240
atgctgtact agctcttcct ggctaggcag tggggaacca ctgtttttta atgttggttat 300
tcattgaggac caatggattg gcgtgacagt actcgag 337
```

<210> 1782

<211> 266

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (89)

<220>
<221> unsure
<222> (132)

<400> 1782
gaattcgcg cgcgctcgac atgcttttgt ctccacagca accagccact gcaggcagca 60
tgtctttcct cccctgctct ctgcttgeng ttgttttgac gctattctgc ttgcatgtct 120
tctgggtggg angtgaggt gttgctggac tctcaggcga agctgaagtc attgaagtgt 180
gtgaagctct gtgcttgcat gagggcaagc aaggaatggc tgtgcctgag gctgctctgg 240
gaaactcctt gccccttaac ctcgag 266

<210> 1783
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1783
gaattcgcg cgcgctcgac gtaatgtcaa catgatgttt cgctcagatc gaatgtggag 60
ctgccattgg aaatggaagc ccagtcctct cctgttctta ttgctttat atatcatgtg 120
tgttcttcac tcagcaggtt ggggatgtgc caactgccga gtgggtttgt ccaacccttc 180
tgggaccttt acttctccat gctaccctaa cgactacca aacagccagg cttgcatgtg 240
gacgctccga gccccaccg gttatatcat tcagataaca tttaacgact ttgacattga 300
agaagctccc aattgcattt atgactcatt atcccttgat aatggagaga gccagactaa 360
atthttgtgaa gcaaccctcg ag 382

<210> 1784
<211> 202
<212> DNA
<213> Homo sapiens

<400> 1784
gaattcgcg cgcgctcgac cctaaaccgt ctattttttt ctagtgaatg tattttaacc 60
acagtgtcct aaactgagaa aactagagag gaaaaagtgg gtgttcata actttgtagt 120
tgaggagagt gttttacatg tctgtgtatt catgactttg ggagtgggta ggatcattgg 180
agagagaact gcacagctcg ag 202

<210> 1785
<211> 224
<212> DNA
<213> Homo sapiens

<400> 1785
gaattcgcg cgcgctcgac ctgaaacaca aggaaagcta gaagaaaaac ttcaggagtt 60
ggaagcgaat cccccaagt atgtatatct ctcataaga gacagacaaa tacttgattg 120
gcattttgca aatcttgaat ttgctaagc cacacctctc tcaactctct cccttaagca 180
ctgggatcag gatgatgact ttgagttcac tgggcagact cgag 224

<210> 1786
<211> 221
<212> DNA
<213> Homo sapiens

<220>

<221> unsure
<222> (91)

<400> 1786
gaattcgcgg ccgcgtcgac attctttgtc attatataag gccctgttt gtctttatct 60
gtacgattgt tagtttaaag tccattttat ntgataggag aatggctatt cctgctcact 120
tttgttttcc attatttttt ttccacactt ttactttgta tctgaatgtg acttttagcca 180
gtaggagagt gtcttgtaga gagcaagtgg tcggtctcga g 221

<210> 1787
<211> 181
<212> DNA
<213> Homo sapiens

<400> 1787
gaattcgcgg ccgcgtcgac ggacaattgc aacgactcca acaaaaccag ttcaaggctt 60
aggaactgtg tctcttagtt tcaagaaaat gaattggatt ttatttggtg tatgtgtgag 120
tatgattaca gatcaagaca cacacccta tacacacca ccccccca cacaactcga 180
g 181

<210> 1788
<211> 207
<212> DNA
<213> Homo sapiens

<400> 1788
gaattcgcgg ccgcgtcgac ctctctttaa aaaacagtat ctagggtaaa tatactctaa 60
cctcttccca ggcaagtaga aaaaaggcag tctggagtca aacagtgagt tcagtttcca 120
gctaggacct tgtggcaacc ttatataaca tctgtaaacc atagttcctc cttattttaa 180
atgaggataa tcgcaactcg cctcgag 207

<210> 1789
<211> 160
<212> DNA
<213> Homo sapiens

<400> 1789
gaattcgcgg ccgcgtcgac gtcttagttt gattggcttg tctttgaaa tgtctccaaa 60
gccactccc ttaactttct tgggtggat tgctgcagtt gccactgtcc cgttggcacc 120
ttcagacttg gtgctgcttg agtcaccccc aacactcgag 160

<210> 1790
<211> 191
<212> DNA
<213> Homo sapiens

<400> 1790
gaattcgcgg ccgcgtcgac agaacacaga tttttagcaa aaggctatct ggtgagttaa 60
ttggctgttt tgttctattt tgctctaata ggtcagttat tcctagctag tctatgtatt 120
tacttatata tgctgctttt ttgtactgtg ctgaagcttt atgtagcaag caacttagcc 180
gacaactcga g 191

<210> 1791
<211> 167
<212> DNA
<213> Homo sapiens

<400> 1791
gaattcgcgg ccgcgtcgac ctgccttaat tagaaagtct gccacttcca gaaagcctcc 60
acagcaagcc agagtcaagg cagtttcttg agtttcttct gtctgtgcat tgatatttgc 120

tccttgacca agaagtaatg ccaccatttc ttcattgctt tctcgag

167

<210> 1792

<211> 213

<212> DNA

<213> Homo sapiens

<400> 1792

gaattcgcgg ccgcgtcgac aaataataaa gatcagaaca gagacaagtt agaaagaaaa 60
accatagggg aaaaaagtca gtaaaactaa gacttcaatt tttgaaacaa agaattgatt 120
tttgaaaaat aaaatcaaca aactcttgga ctaagaaaga ggacaaaatc agaatgaaa 180
atggagaata tattacaaca ggtactctc gag 213

<210> 1793

<211> 227

<212> DNA

<213> Homo sapiens

<400> 1793

gaattcgcgg ccgcgtcgac cttgattgga aagttttctg aaacaaagag acttactaat 60
tttttttgtt gttctatttg attcttgcac ctttgtccca cttttctctt ctttgtttct 120
ctctgtggct gttttatttt tactttgata tgcttttact tctttcttat gttgttttct 180
gtatctatac aggcattatc tttgtgttac gtgggggatg cctcgag 227

<210> 1794

<211> 198

<212> DNA

<213> Homo sapiens

<400> 1794

gaattcgcgg ccgcgtcgac agactctcaa atataaaata tttgctacag tgtatatatg 60
gtacataatt gcttgttgct tttaaagtcc cttctgttgt tctgcttccc actgatttca 120
taccagctca tgaatggatc attacagtct ctccagaggc ttagaatgat tcagaatggt 180
caatgcacag atctcgag 198

<210> 1795

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1795

gaattcgcgg ccgcgtcgac gggaaatctt tttttttccc ctagtaatag tttgataaga 60
aattttagtgt attgactgcc tcagtgcacac aatttatctt taaaggtgtg gaagctggtg 120
gggaccaaatt gttacctgtg tttttgctgt tgattgctat tttcagaagc aaaccatggt 180
tttcacttac agtaggagtc aacaaatttg ggattttaga agggggagga gggagcggac 240
tcgag 245

<210> 1796

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1796

gaattcgcgg ccgcgtcgac ctatttatgg gtaaaatctg taaaactggg tcagtttttt 60
ggacaatgtg ctgctgctta tcctatttct atatgggtctc tgcttggggt ggttatgtat 120
ttatcatcaa tcttattcca ctgcatgtat ttgtgttgtt actgatgcag agatacagca 180
aaagagtcta catagcatat agcactttct acattgtggg tttaatatta tcaatgcaga 240
taccttttgt gggattccag ccaatcagaa cacatctcga g 281

<210> 1797

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1797

```
gaattcgcgg cgcgctcgac tgaaaaatcc attctcttgg tgtcactacc agtctgctta 60
gttttaagtg aaattccttt tatgtctact tggtttttac ttgtgtcaac atttagtatg 120
ctacctcttc tattgaagga tgaactccta atgccctctg ttgtgacaac aatggcattt 180
tttatagctt gtgtaacttc cttttcaata tttgaaaaga cttctgaaga agaactcgag 240
```

<210> 1798

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1798

```
gaattcgcgg cgcgctcgac ccttttattt catctgtatt taaacctctc tattccctgc 60
catacatctt tttgccacgt atagctggaa ttaagtgttg tcttggagct gttgtacatt 120
taagaataaaa cttttgtaaa aaaagaaaaa tcttacagtg gtcacatc tcctttagtgtg 180
ttttcactaa gtcgttccca ccataactgt gaatttaaag taaaaccagc tcagaatctt 240
gccagagtct gttcttttgt ccttgttcta cccatctcga g 281
```

<210> 1799

<211> 209

<212> DNA

<213> Homo sapiens

<400> 1799

```
gaattcgcgg cgcgctcgac gtgtatactt aatagaggta attttttctt cccctagtta 60
tttctttccc attgaaatcaa gttacataca agtttctaac cattcctgtt ataggctttg 120
gtgattgact tcattttaat aatcttttta tttcattgcc tttcaccagc ttttttaaac 180
tcattgaaatt ccacacccca cttctcgag 209
```

<210> 1800

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1800

```
gaattcgcgg cgcgctcgac gcaatactta agagtagttt ggggtttattg aagatttttt 60
gctaggagag agaaaatttt ttgctaggag aggtttcaag gtaagagtat atactttaaa 120
catgtatata aatgtttttg ctacttttct gtcactacct ttcttacctt gtcctttaca 180
tggatatagg aagaaactcg ag 202
```

<210> 1801

<211> 131

<212> DNA

<213> Homo sapiens

<400> 1801

```
gaattcgcgg cgcgctcgac cgaggccaac acacagaaat taaaagtaga aacaaaatga 60
gggcacactt gctcctgtcc ttggcttggc cctccaacc tccaaaagaa ctgtcctccc 120
cattcctcga g 131
```

<210> 1802

<211> 265

<212> DNA

<213> Homo sapiens

<400> 1802

gaattcgcg cgcgctcgac atttatctgt gaatggcagt ccactcaac tataaactat 60
 ctgtatctta acaccagaa caaatctagg cactcagttg gcttctcagt ggttttttgt 120
 ttgaatcccc tgccctctga tgtatttgca ctattttgct ttattattta acttcttact 180
 tatgtttttt gtctctgcag tagtatcact gcaggagagt gaagagttgg taagaaagt 240
 tcatcattta caggtgattc tcgag 265

<210> 1803

<211> 271

<212> DNA

<213> Homo sapiens

<400> 1803

gaattcgcg cgcgctcgac ggacaaggca ggggtaggca cactggtaag cttaggattg 60
 aatagtttga gtaattttgt tggctcttgg gatctagggg ggattcgtaa ttgtctagt 120
 agggcagggg aatattgaat tgggttatga gagtttggta aaggagatag ttgggagtat 180
 gggctctgga ttggttgggt tgtatatgaa aggcattgct gcagtggagt ttatcatcta 240
 tgcattagct tgccctggga ggggcctcga g 271

<210> 1804

<211> 180

<212> DNA

<213> Homo sapiens

<400> 1804

gaattcgcg cgcgctcgac gtatttttaa attttgaat ttaataacta cttttgaatg 60
 aaaacattac ctttaactct ttttttttcc tttcttaggc ttgaaaagga atacactaca 120
 ataaaaacga aagaaatgga agagcaagtt gaaattaaag taagcagtcg ggggctcgag 180

<210> 1805

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1805

gaattcgcg cgcgctcgac gattagagta ataattttgt catttaaaaa cacagttggt 60
 tatactgcc atcctaggat gtcaccttc caagattcaa cgtggctaaa acatcttctg 120
 gtaaattgtg cgtccatatt cattttgtca gtagccagga gaaatgggga tgggggaaat 180
 acgacttcac tcgag 195

<210> 1806

<211> 303

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (271)

<400> 1806

gaattcgcg cgcgctcgac ctcggaactt cttcacaatg agaaacctga aagggtcccag 60
 cagccagcaa tgaatgaaag gtgggggtgg gccgctggca ggcgaggcc ttgtgagcca 120
 tgtgcctgtg ctctcaagtc cgaagtttgt ggggatgcat gcaggagatt ctggccctga 180
 ttgtttcccc agaaccagga tgcgttcttg ttggcaggac aactggcctt cacttggtgg 240
 ccttcagtgg gtgttctcat tggttgcctt ngtttagtgc cctcagttgt atctcttctc 300
 gag 303

<210> 1807

<211> 191

<212> DNA

<213> Homo sapiens

<400> 1807
gaattcgcgg ccgcgtcgac caatttctga agaagaccaa aaagaaccac aagacgatga 60
atgaaaaggc atggaagcgt tgggtgcacac aaatcctctc tgccctaagc tacctgcact 120
cctgtgaccc ccccatcatc catgggaacc tgacctgtga caccatcttc atccagaaca 180
acggactcga g 191

<210> 1808
<211> 282
<212> DNA
<213> Homo sapiens

<400> 1808
gaattcgcgg ccgcgtcgac ataaaaggaa gattaacaaa gttaccctgg aacaatagct 60
tacttatcca aatctcaaca ttacattttt aacagttttg tatgtttcaa agttgaaact 120
actgtaagag aaagccaata ctattttatat ctgaatcaac agtagcataa acatttttta 180
attgagattg tattttaatc ctttttggtt aagtacatta acaacagttt ttcacaggat 240
atgaacttgg cgaaattagt tcttaatctg aatatactcg ag 282

<210> 1809
<211> 269
<212> DNA
<213> Homo sapiens

<400> 1809
gaattcgcgg ccgcgtcgac atggagatac ctagtatgga tcggagagag ctgtttttcc 60
gagatattga gcgtggtgat atagtgattg gaagaattag ttctattcgg gaattcgggt 120
ttttcatggt gttgatctgt tttaggaagt gtatcatgag agatatagcc cacttagaaa 180
tcacagctct ttgtccctta agagatgtgc cttctcacag taaccatggg gatcctttat 240
catattacca aactggtgac ttactcgag 269

<210> 1810
<211> 218
<212> DNA
<213> Homo sapiens

<400> 1810
gaattcgcgg ccgcgtcgac cagttttttg taagactctg tggattgtt ggaggaatct 60
tttcaacaac aggcattgta catggaattg gaaaatttat agttgaaata atttgctgtc 120
gtttcagact tggatcctat aaacctgtca attctgttcc ttttgaggat ggccacacag 180
acaaccactt acctctttta gaaaataata cactcgag 218

<210> 1811
<211> 250
<212> DNA
<213> Homo sapiens

<400> 1811
gaattcgcgg ccgcgtcgac tgagaattgg caaactaatg ttgtttgggt ctatcttccg 60
ctgttttgat cctgctctca ccattgctgc cagtttggtt ttttaagtcgc cgtttgtatc 120
tccttgggat aaaaaagaag aagctaacca gaaaaagctg gaatttgcat tcgcaaacag 180
tgattatctg gcccttctac aagcgtataa gggatggcag ctaagtacaa aagaaggcgt 240
gcttctcgag 250

<210> 1812
<211> 246
<212> DNA
<213> Homo sapiens

<400> 1812
gaattcgcgg ccgcgtcgac ggggaaaaca tcattactga tattttaaac ggatgtttta 60

ctttccatca acatgaacct caacttgata tgatgcagat tgaaggaaat caccataat 120
 tccacattaa gaaggcctgt gatattttat gggaaaaata atagagaaaa tgctaacaga 180
 aaccctatta agcattaagc tttatggagc aaagacaaat ccagtgggtga aagatacaca 240
 ctcgag 246

<210> 1813
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 1813
 gaattcgagg cgcgctcgac cttcaccttc caccatgatt gtaagtttcc tgaggcctcc 60
 ccaggtgtgc ttcctgtaca gcctgtggaa tgttaccaa gacgttggaa gaggtggcta 120
 tggacatcac ctgggagaag tgggaagcaa tggacactgt tcagaagtcc atatacagaa 180
 acatgttga ctcgag 196

<210> 1814
 <211> 264
 <212> DNA
 <213> Homo sapiens

<400> 1814
 gaattcgagg cgcgctcgac acagatttga gcaaatacaa ttaaggtgtc ttattttttg 60
 catcaagtaa ttattgtgt ggtctttcta ctccacaaaa taatttttcc tttttgcagt 120
 tgaaaattaa ctgcattatt aactaattaa taaaaataat caagtgggtat aagggattag 180
 tttaccctca agccgatgac tccatggcta ctgatattag ttagtttagg atttttaaaa 240
 agcatatcag acccccaact cgag 264

<210> 1815
 <211> 301
 <212> DNA
 <213> Homo sapiens

<400> 1815
 gaattcgagg cgcgctcgac taattttcct gccactactc agtactgtgt ggggccagga 60
 tcaccattag ggaagacaga gtagctcaga aatcagtagt gaggaggagg acagcacttt 120
 gtgtggtatc ttgctctagg agcattttca agccatcaga agtgggactc ttgaagacta 180
 tttctgactt tctcagcaca aattaagata ataggagatg gaggtcccat ttgaaaaaca 240
 ttttggttgt ataattggtta gcataaaaaca tacttttttc aagttaactc aggcactcga 300
 g 301

<210> 1816
 <211> 214
 <212> DNA
 <213> Homo sapiens

<400> 1816
 gaattcgagg cgcgctcgac gataattaaa gactccactt ccaagaaagg atacaacaag 60
 gaaaataaga ggttggttaa taaaaattat gccaaagata agcctgtaga aagcttctgt 120
 ggtgcgtatt tggtagattt tatggatgga tttcgtgaag gataaatagc agagtcctga 180
 ggggggaaaa aaggatagaa ggccaaact cgag 214

<210> 1817
 <211> 226
 <212> DNA
 <213> Homo sapiens

<400> 1817
 gaattcgagg cgcgctcgac gcacttecta gctatttcta ctacctttcg tcttcatgat 60
 tttcttactt ctatggctgt ttccgcacct tgagggtttt cttccttctt atattcattc 120

tcccacaagt ttaatttatg ctatgtgtgg cttaaagtat tacctaaatg ttgtcaattc 180
gtcccccatc acccccgcaa atcatcctct ctacttacaa ctcgag 226

<210> 1818
<211> 248
<212> DNA
<213> Homo sapiens

<400> 1818
gaattcgagg cgcgctcgac cttcaggaac ctgtcacatt tttccatctg gtacctccac 60
cctattctga gtatcctccc ctttccaccc caacatagta tctttcaaag aatcccttgc 120
ataggagact gtaaccgaaa gtgttagctt ttcaccaggg tattttacact ttacgcctta 180
gttctaattg tggaaggaaa aacttttccc ttgtcaaagt aatgttatgg cttcagagaa 240
cactcgag 248

<210> 1819
<211> 165
<212> DNA
<213> Homo sapiens

<400> 1819
gaattcgagg cgcgctcgac cttgattttc attttgcatt atattgacgt gtttttttga 60
aggaaaaaaa gtaataaaaa tctgatagtc taagactcca ctatttaaaa gcctaattac 120
tttaaaaaata tgcatacttt cagaactttt accaaaacac tcgag 165

<210> 1820
<211> 233
<212> DNA
<213> Homo sapiens

<400> 1820
gaattcgagg cgcgctcgac ctttttgctt tgctcatttt aatttttttg ttgaagatta 60
acagttctgt tgttctggct actgttgctt ggaagaaatc acacatgaac aaactcacct 120
tctgcattat actgacatca ttatatttgc caattgattg tgagctaatt ggggttatag 180
aaacgtgcta tagcataaca gactgtaatt atttctctct aggcgttctc gag 233

<210> 1821
<211> 267
<212> DNA
<213> Homo sapiens

<400> 1821
gaattcgagg cgcgctcgac ttttgattct gaaaattggg ggaaaaaact tttaatcaca 60
attttcttca atacaagggg aaaatattct tgcggattcc caacgttttg tgatatgagc 120
agaaaaatcat tagcatttcc catcatttgt tcatatttgt gttttctgac agttgccact 180
tgtagcattg cctgtactac agtatttttt gccaacctca ggcatactcg ttacatctgt 240
attgaacttt cggccctaaa actcgag 267

<210> 1822
<211> 248
<212> DNA
<213> Homo sapiens

<400> 1822
gaattcgagg cgcgctcgac cctaaaccgt cgattgaatt ctagacctgc ctctggtttg 60
ccggacttgt ctttctgcac ctgatggttc agctctgcaa ggatcgattt gaatatcttt 120
ccttctcgcc caccacggcg atgagcagcc acggctcgagt cctgtccctg ttggttgcca 180
tgctgctttc ctgctgtgga ctggcgggcg tctgctccat caccggctac acccagaaa 240
tgctcgag 248

<210> 1823

<211> 282

<212> DNA

<213> Homo sapiens

<400> 1823

```

gaattcgcg cgcgctcgac acttgcccac ccagcctcct gctctagaca ctccctgtcc 60
aggccatctt gctgctctg gttaatcatt cagaaatatt gtaccaattc tactctttcc 120
ctcccttcagt gacttactat tgtctgcaga atgaagtata agttccttat tcaaggactc 180
atatgcagga actttccaga attgtcctct tcctatttcc ctagtgccat tgacatcggt 240
actttgcatc agtgcctacc accctttccg atacatctcg ag 282

```

<210> 1824

<211> 277

<212> DNA

<213> Homo sapiens

<400> 1824

```

gaattcgcg cgcgctcgac tttttgtaac acttttttgt atttttgcca ttgaaaagg 60
ttgtggtgta gttggtctgt aattaagttg cagatttaaa actgctgtta gctttgtaaa 120
tcaaaatata ggtgtttttt gtccgtggtat atcgctcattc catctgcagc tggagctgga 180
atcccatgta tcttctagct accattcatt ttcttcaactg ttcacaaaag aagagtgtga 240
aattcagtga atgctgttac taatcctggt actcgag 277

```

<210> 1825

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1825

```

gaattcgcg cgcgctcgac cagagtaaga gcccatctca aaaaaaaaaac caaaacaaaa 60
acaaaaaaag ggtaaggact ttggtggggg atcatatgat ttggaacata gatttttttag 120
tttttgtttt tttttgtggt cttcaagaga gcagttcaga gaccaggggtg catggtggtt 180
tactgagtgg gttggaagaa tatggaagca cgctcgag 218

```

<210> 1826

<211> 195

<212> DNA

<213> Homo sapiens

<400> 1826

```

gaattcgcg cgcgctcgac tgcatatggt aggagtggaa acaatctgga aaacattttt 60
ttttcatcca aaaagtattc tccttgggca tatctgatgg aaaaaaacct tgattttatt 120
ttcgtatctt tagtctgtgt tctttctagt tatttggtag taattatgtg caatctaaaa 180
acacccccac tcgag 195

```

<210> 1827

<211> 196

<212> DNA

<213> Homo sapiens

<400> 1827

```

gaattcgcg cgcgctcgac ggttctttcc attcctatct cctccttaac catttctcta 60
cccagaatca gcttggttaac agtttaatgg cattgcttca ttttaaaaaa tgattgcatt 120
gtatttcatt ttatggatgt gccaaaattt acataattgt tattctgttg atgaaagttt 180
aggatgtcac ctcgag 196

```

<210> 1828

<211> 205

<212> DNA

<213> Homo sapiens

<400> 1828

```
gaattcgcgg ccgcgctcgac gatactccct cattcatgaa aaaatgcggt tatttttagt 60
agtgtcttgg attctgtgtt ttgtttgttc ttgggttttg tttctagaag agtcttggtg 120
gaagctctgt ttccagaatg ctggattggc tgtgggtggg tccataaccc actgcctgta 180
tcaaactcat actccaagac tcgag                                     205
```

<210> 1829

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1829

```
gaattcgcgg ccgcgctcgac cagggttggg gactctactt gctcaccaga tgatcctaca 60
cctgccacct ccgatggatc cactgcctct gtgcctgcct gtactgtga tgctccagtg 120
gataactcag catcccagcc taggccaat gccactgaag atggacctgc accctgggga 180
cccaggagtc ctaccactca gctgtcccca ggagtgccca gacctcatt cttatccagg 240
acttctcgag                                     250
```

<210> 1830

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1830

```
gaattcgcgg ccgcgctcgac ccgaggttgg accctactgt gacacaccta ccatgcggac 60
actcttcaac ctctctggc ttgccctggc ctgcagccct gttcacacta ccctgtcaaa 120
gtcagatgcc aaaaaagccg cctcaaagac gctgctggag aagagtcagt tttcagataa 180
gccggtgcaa gaccggggtt tgggtgtgac ggacctcaaa gctgagagtg tggttcttga 240
gcatcgagc tactggctcg ag                                     262
```

<210> 1831

<211> 215

<212> DNA

<213> Homo sapiens

<400> 1831

```
gaattcgcgg ccgcgctcgac cccaaggtaa tgctttcttc catttcatca ggttctttta 60
tccccactgc accccctccc ctctctcctt gcctatctgg atggcttctc agaagctcgg 120
ccctagtctt ccctgccttg gcggggccag agccactac tgctgaggca gactgctct 180
cgtcagctgt gttgccttta ccaagtgcc tcgag                                     215
```

<210> 1832

<211> 173

<212> DNA

<213> Homo sapiens

<400> 1832

```
gaattcgcgg ccgcgctcgac cagaaaacct ggacagttcg cttctacaca agaattttat 60
atgtatttat gaagatgatt ctgtacccta gtatatctt ttgggcatgg actaatttgt 120
atctgtttta ctcatattct gcacgatctg tatatagtag atcagaactc gag       173
```

<210> 1833

<211> 204

<212> DNA

<213> Homo sapiens

<400> 1833

```
gaattcgcgg ccgcgctcgac agaacggccc ctgccaaca ttttaacct gtacaccatc 60
```

ctcaccgtca tgctccagtt ctttgtgcac ttcctgagcc ttgtctacct gtaccgtgag 120
 gccagggccc ggagccccga gaagcaggag cagttcgtgg acttgtacaa ggagtttgag 180
 ccaagcctgg tcaacagcac cgtc 204

<210> 1834
 <211> 187
 <212> DNA
 <213> Homo sapiens

<400> 1834
 gaattcgcgg ccgcgtcgac cctagatata aggaaaatag tagaagcttg taaagccaaa 60
 actgatgctg gcggtgaaga tgctatcttg caaaccagaa cttatgacct ttacatcact 120
 tatgataaat attaccagac tccacgatta tggttgtttg gctatgatga gcaacgacag 180
 tctcgag 187

<210> 1835
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 1835
 gaattcgcgg ccgcgtcgac ctatcctgcc tgcctttatc tgccttgccc tgcgattatt 60
 tggctttgta agcataagct acgtaagaca taccacacct aagaaactaa acagcaatga 120
 aaacccatat gctcgag 137

<210> 1836
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 1836
 gaattcgcgg ccgcgtcgac gttggtgtta atttctgatt aacccttgaa tttaccgtct 60
 tctcatcttc tgtacaaaag cctcaagtga gggtaaatt caacattatc ctgatctaga 120
 cagcccccat tctcaatcca cccttttcca agttgattgc ccaaggactt ctaacaataa 180
 actctctttt gcaccacaga cttctttgaa aatatacatg ctgttgaccc gcacg 235

<210> 1837
 <211> 153
 <212> DNA
 <213> Homo sapiens

<400> 1837
 gaattcgcgg ccgcgtcgac tggtgataaa atgaaactag tggaatcttt gtgtcaagta 60
 ttacagtctg ctgggttttt cagcattgac caggaagaag atgttgactt cctggccaga 120
 ttttccaagt tggtaaatgg aacgggactc gag 153

<210> 1838
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 1838
 gaattcgcgg ccgcgtcgac ccatgaagag aagtttacag gccctctatt gccaaactgtt 60
 aagtttcctg ctgatcttgg cactgaccga agcgttgga tttgccatcc aggaaccatc 120
 tcccaggga tctcttcagg tctcccttc aggcactccc ccgggaacca tggtgacagc 180
 accccacagg ctcgag 196

<210> 1839
 <211> 292
 <212> DNA

<213> Homo sapiens

<400> 1839

```
gaattcggcc aaagaggcct actttctcca gaagtcaaga aagcggtcag cgacgggtgtg 60
attctcaaac atgatattgt ccacatgcct gtacttctgt ctgttcagcg tgatggcgct 120
cggctggcac ttagtacaga tgccattcgg ccacgggagg tgccctctgc accctgactt 180
aatcttgtag ctgatgttct ccagggcaac aaacttcccc ctacttgtea gcccctccag 240
tcagcttccg gatgtaggcg tgggaaggaca tgtgcttcac gggaggctcg ag 292
```

<210> 1840

<211> 312

<212> DNA

<213> Homo sapiens

<400> 1840

```
gaattcggcc aaagaggcct attgaactac tggctgacca tgtttcgaat caggtagatc 60
caccggccct gcctgcaggt gatcgaggcc atgctgggtg ccgccgtcac ggccacagtt 120
gccttcgtgc tgatctactc gtcgcgggat tgccagcccc tgcagggggg ctccatgtcc 180
taccgcgtgc agctcttttg tgcagatggc gagtacaact ccattggctgc ggcttcttc 240
aacaccccg agaaagagcg ggtgagcctc ttccacgacc cgccaggctc ctacaacccc 300
ccaaccctcg ag 312
```

<210> 1841

<211> 249

<212> DNA

<213> Homo sapiens

<400> 1841

```
gtcaggatgc agatgtctcc agccctcacc tgcctagtcc tgggcctggc ccttgtcttt 60
ggtgaagggt ctgctgtgca ccattcccca tcctacgtgg ccacactggc ctccagacttc 120
ggggtgaggg tgtttcagca ggtggcgtag gcctccaagg accgcaacgt ggttttctca 180
ccctatgggg tggcctcggt gttggccatg ctccagctga caacaggagg agaaacccag 240
caactcgag 249
```

<210> 1842

<211> 779

<212> DNA

<213> Homo sapiens

<400> 1842

```
gaattcggcg ccgcgtcgac gtcttggacc agtattcaat gtggggaaat aaatttggag 60
tattgtcttt tctgtattct gtattactga caaagggcat tgaaaacata aaaaacgaaa 120
ttgaagatgc aagtgaaccc ttgatagatc ctgtatatgg acatggcagc caaagttaa 180
ttaatctcct gctgacggga catgctgttt ctaatgtatg ggatgggtgat agagagtgtc 240
caggaatgaa acttcttggg atacatgaac aagcagcagt aggtatttta acactaatgg 300
aagctttaag atactgtaag gttggttctt acttgaaatc tccaaaattc cctatttga 360
ttgttggcag tgagactcac ctcacggtat tttttgcca ggatatggct ttagttgccc 420
ctgaagctcc ttcagaacaa gccagaagag tttttcaaac ctacgacca gaagataatg 480
gattcatacc cgattcactt ctggaagatg tgatgaaagc attggacctt gtttcagatc 540
ctgaatatat aaatctcatg aagaataaat tagatccaga aggattagga atcatattat 600
tggggccatt tcttcaagaa tttttctctg atcagggctc cagtgggtcca gaatcttcta 660
ctgtctacca ctacaatgga ttgaagcagt caaattataa tgaaaaggtc atgtacgtag 720
aagggactgc agttgtgatg ggttttgaag atcccatgct acagacagag acactcgag 779
```

<210> 1843

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1843

```

ggccccctatt gcgtggctgc tgggtgtgtgg ggtcagttcc agcagatgaa tgtgtcatgt 60
ggcacacctt gtcctctccc gcagcatttc ctgggttcccc ccagacctt gagcgctctt 120
tgggaccagc aaggagtcct tgcacaggga aggccttgagg tgagaagccg cttcccagac 180
tgtcagggcc aggcctgggt ctagaattct tgcgtgtgct ttgcagagtc aacagcccat 240
cagcccatgt tttagagggg acacttttgt cctcggttcc caccctcagc aagcaggcct 300
ccagcccagc gaaggcctct gccgtagtga cgttgccgtg tggggctgcg tggctgttcc 360
ccttggctgg agcattcagc caaccccagc gtcccccta cctcgag 407

```

<210> 1844

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1844

```

gaattcgagg ccgcgtcgac ggagacggcg ccccgtagc gaggcacct tcagcaaccc 60
gggggcagcg ttttccccct accggaaatc tgatgggctt atgacatcat ggctggctgc 120
tgagcgatga agtggatgcc acaaagaaat ccgacatata agatagattc tgaaatcggt 180
ttccctccag ctgtagtaac aggcgtgaag tcaggagaat ttgagctttg tttaaaaaat 240
aaataaataa ataaataaac cataacaaag tcttgccctg tattaatatgc aattttotta 300
aaaacaagca aaccttttgg acatcatctt attttaatatg aaatgctgag ttttatgaaa 360
ctactcgag 369

```

<210> 1845

<211> 213

<212> DNA

<213> Homo sapiens

<400> 1845

```

gaattcgagg ccgcgtcgac aagaagctta agcgcatctt tgtggctact aactcacctg 60
acagctttgc atttgagtga caattccctg tccggaattc cttcagacat tgccaagctt 120
cacaatctgg tgtatttgga cctgtcatct aataaaatc gtagcttacc cgcagaactc 180
ggaaacatgg tatcactcag ggcgtcctc gag 213

```

<210> 1846

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1846

```

gaattcgagg ccgcgtcgac ccagtatctg ttttggagtc gtctttcatt tttaacgttg 60
tttctacagg gtatttgcca ggtcttctc ttttcctttt aataattatt ggctgatctt 120
cctcctgaga ttttatgggt tcatcatcgt tctgtctctg cttttcacca gtagtttcac 180
tgctgtata ttcattttt tcttccatga cctttgaggt agtgcatttt gtctcagaac 240
tggttttagg taattcttcc aaatctctgg agttctcttc ctttgtgtca tgtggctccg 300
gattgaattc tagacctgcc tccagtaaca aggacctcga g 341

```

<210> 1847

<211> 110

<212> DNA

<213> Homo sapiens

<400> 1847

```

gaattcgagg ccgcgtcgac gcttcgggga tacacacgct ggcaactcta taggacagtc 60
ttatttgata tagcataagt atgtttttta gaattcatgt tatcctcgag 110

```

<210> 1848

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1848

```

gaattcgcgg ccgcgtcgac cagccttaca ctaggcacac acttttagagt ctggggctcc 60
agtggggccc gcctaatttt tttcccccc aagacagggc cttgctctgt ctcccaggct 120
ggagtgcagt ggcatgatca tggcttactg cagccttgat ctcccaggct caagcgatcc 180
ttctgcctca gcctctctgg tagctgagac tgcattgccc gctccaaatc accttgattc 240
atatcagcag taataatcac ttgtgttctg aaagaaaggg caccagaagt tctagcaaaa 300
ttcagttgtg ttctgtgagc tagcactttt tcctctgacc cctgcctcga g 351

```

<210> 1849

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1849

```

gaattcgcgg ccgcgtcgac cgtcgattga attctagacc tgcccgtctg agagcacagc 60
tccccacttc ttggaccccg tcttcctctc caccaagagc cattcgcagc ggcagccctc 120
gctggccacc ttgagttctg tgcctggtgc gccggagccc tgccctcagg attgcagccc 180
tgcttcacac ccgctgcacc ctcccttggt catttcaaca ggtgccactg tccccactt 240
tgcagagggc tccggggggc cagtggccac taccagcacc ttgattcttc ctccagagta 300
cagttcttgg ggctacccct atggtgagtc gacagccagg gcttggcagg gaggggacgc 360
caagagcccc acgcagaccc tgctttcttc ccgcagaggg cccaccgtct cgag 414

```

<210> 1850

<211> 359

<212> DNA

<213> Homo sapiens

<400> 1850

```

gaattcgcgg ccgcgtcgac gttgggatgt ctatatgtct gctgcagtcc ctaccgtctg 60
aaacggggag aaccctcggt gggaggctgt tgctggtctg tagcgcttct atctaagctg 120
cccagggtgg tggccccctc tagtcttttg ctccggcagc gcttccatcg ggtcaccgga 180
aactccact cgaccatcaa cccaaacaga gaacgtgaaa gctagagtca cttcaacagg 240
ttcctaaga taaaggctaa actctagagt ggtggtagaa gatgagttgg ttcagcatgc 300
tatggggtaa gtaagcttgt caccgagggc tacaggcgct tcctgggaag gacctcgag 359

```

<210> 1851

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1851

```

gaattcggcc aaagaggcct agagaggttt aaatgagtct ggctgggtgt aagtcagatt 60
cttatggctt tcttctaatt ttgaaggctg ttctaattgc attttcttta agtcctgtag 120
taattcttca gaaagatctt catcaccatg aattttgaaa gtaagatcac tggcactaat 180
agagcgacgt aattttgtac acttggaaaa agatgtgtga aaacatttag caaattttgg 240
atcttgaaca tcaggcataa tttctgttgg agatgtaaat ggggctctcg ag 292

```

<210> 1852

<211> 229

<212> DNA

<213> Homo sapiens

<400> 1852

```

gaattcggcc aaagaggcct agggaaaaacc tttgataatc ttgttgga aaatgcgtat 60
ttttttgatt actagttagt ttatttattt atttttttat ttttcgagat cgtgccactg 120
cactcagcc tgggcaacag agcaagaccc tgccaagaga aaaaaaagac tgtgtctttt 180
cacattccac caatatactg atagcatctg tctctctgca aatctcgag 229

```

<210> 1853

<211> 288

<212> DNA

<213> Homo sapiens

<400> 1853

```
gaattcggcc aaagaggcct acgaggggtg agaggaatgg aaagcagtgt cccttttgag 60
aaggcaaatc tacagctggc ttttgtaatc ctagctatct tttgtttgct tgctaagtct 120
ttgatagtcc ccagtgtggt ttgtctgcca gtgatctcag caccaccaga gagcttgcta 180
gaaatgcggc atcccaaccc caccacagcc ctcccaagtc agatactgcc acctcacgag 240
gccccccagg gatccacaag ttcattaaag tttcaggaat ccctcgag 288
```

<210> 1854

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1854

```
gaattcggcc aaagaggcct aatagaagtg agcaaaacaa aaatcccgtt ccttgtggag 60
cttgatcttt gatgagaagg aggaattcaa attttaaact tctgttaaac gatattttat 120
ttccttattt gatttttatt ttgagaccga gtcttgctgt tgcccatgct ggagtgtctg 180
ag 182
```

<210> 1855

<211> 198

<212> DNA

<213> Homo sapiens

<400> 1855

```
gaattcggcc aaagaggcct acgattgaat tctagacctg cctcgagctt cctgggtctc 60
cacatgctgt tcatcactct cctcctcttt acctggatgc ctctgacctg tgccctccga 120
cctccactga gacaatgtca cctccaggaa gtgcccctca caatcctctc ctcccacaa 180
acctgtccc gactcgag 198
```

<210> 1856

<211> 239

<212> DNA

<213> Homo sapiens

<400> 1856

```
gaattcggcc aaagaggcct agacattcct tgtgacttgg aagtttacaa tcatcatcct 60
ttttttaaag gactctatct ttcttttctt ttaaactcct ttctctcttc tttttgtctg 120
cttctgtgct tgaagccctt tggatgttac cagtaggcaa agcaaaaatg gcctcatctt 180
tattttccat tcttttctta atttttatgt ttcttcttct acatcctatc ccgctcgag 239
```

<210> 1857

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1857

```
gaattcggcc aagaggccta gtgcattgag gttgcaggta tacagtcacc aaagaacctg 60
aaataattgc cggaatgata tcctctaaaa gatgtgagcc tctcagagag agagagagag 120
ggttcctctt gcaacaggca tcgtgtgtgt gttttatgtc ccttctcttc tgctgctgtg 180
cacttaattc ggttccagcc gtgtcaggga gactcgag 218
```

<210> 1858

<211> 248

<212> DNA

<213> Homo sapiens

<400> 1858

```

gaattcggcc aaagaggcct acttcctttt cccctaagt taataggaca gagatatcat 60
atccttttct ctattctttg ataattcctc cctgtttttt tccctttctt tttctagaac 120
tcctatcagt cacaagttaa aggtcctaaa ttgacctaat gactctttct ttttactcat 180
atcttctgtc tcttttattt tgttctagtt tcggcttttt aaaattttat cttccaactc 240
cgctcgag                                     248

```

<210> 1859

<211> 242

<212> DNA

<213> Homo sapiens

<400> 1859

```

gaatttggcc aaagaggcct aactttttca acctctattt cttacttctt gcctgctctc 60
agtttgttcc cgaaatgaga cttgggtcac tctataccta ctgggttccc ctgggcttcg 120
tgctggccgt cactgtcatc cgtgaggcgg tggaggagat ccgatgctac gtgcgggaca 180
aggaagtcaa ctcccaggtc tacagccggc tcacagcacg aggcacagtg aaggatctcg 240
ag                                     242

```

<210> 1860

<211> 210

<212> DNA

<213> Homo sapiens

<400> 1860

```

gaattcggcc aaagaggcct aggccaagaa aaaagaaatt ggcattctct agcaaagaga 60
ttagactttt aaataactct tataaaacag gttggcgatc atttccaag attggtttcc 120
cttgagtttt tgctaaaaca aatcttagta gttttgcccg tttaaaacaa ctcacaatcg 180
taaagtctac tattcctaag atatctcgag                                     210

```

<210> 1861

<211> 253

<212> DNA

<213> Homo sapiens

<400> 1861

```

gaattcggcc aaagaggcct agaaggacat cacaatgctg ttagacaccc agtgcatctt 60
tgccctgac agaatattgga actacaataa atctcggata cattccttcc gaggcgtgaa 120
ggacatcaca atgctgttag acaccagtg catctttgaa ggagaaatcg ccaaggcctc 180
tggaaccctg gcgggagccc cagagcactt tggagacacg atcttattca caaccgatga 240
tgacattctc gag                                     253

```

<210> 1862

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1862

```

gaattcggcc aaagaggcct accaagtctc aatttttagcc ttacaaatta ctaatttact 60
gcttctctct ctctaagcct cagctccctg atctagacca tgagatttac agtaggagag 120
taccatgttt atccccaat acttaacagc tagggttttc ccagactgaa taataataat 180
aactttttta aaattcagaa ggtatcttca agttcttggc ttgcttcttg tacattcaat 240
atcaaagaag agaaaacaca ctatctgaga gtacttccca tgcacctaat aagtgcctaa 300
gccacctggt gctagagccc ttcacaaaaa tgagcatcag ctttgccttc agaaagcagg 360
gaccacatat atatgattta aaaaaaatct gcgatcaact tttctctaaa aaacccaaat 420
atgctggggt acagaaagat caatgcaaaa gcaaaacatc ctgtgcctgt cctaaccctc 480
tcgag                                     485

```

<210> 1863

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1863

```
gaattcggcc aaagaggcct aagatattgt catgttcatt cagaattata cccagtcatt 60
ctccctgctt ttagcaacca atattttaat aatgtataat attttgtcca ctgaatgtgc 120
cactttacat aacaatactc ctgatgctgg actttcacat tgttatcaac ttttcaactgt 180
caataatggt gcaatacata tctttttgag agataggggt ttaaattttc tttattttga 240
aataagttct aggttagagc cccaggatgg gattagttgg tggaaaatta agaatcctaa 300
tgcactgaag actcctattg aaaccaagag caagatactc gag 343
```

<210> 1864

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1864

```
gaattcggcc aaagaggcct aggtagttag aagtcgagag tcagtaattt tcttacttaa 60
tattgtgggg atcttactta atacataaag ttaatgaac tagaaatagt ggtttaatat 120
attacttata attcaaaaat taacctatat ttacagatgc ttacacagtt tctttgtgaa 180
tccacctatg gttttatttt aatttaatttt ttattgcaaa gcaatgaaat gttgctttgt 240
ggagccagaa agctcgag 258
```

<210> 1865

<211> 290

<212> DNA

<213> Homo sapiens

<400> 1865

```
gaattcggcc aaagaggcct atgaattcta gacctgcctc ttataagcca cattcctgct 60
gttctcctgc actcttctga ttctgtatct ttacatctag attattttta cctcctaggt 120
tctttccctc ttcttactta ccttataaaa atacatccat tcttcaaata ttttcccaat 180
ctcccagtaa gaattagcct ctctcaatgc tgggtgcagt gctcattcct gtaatcccag 240
cactttggga agccgaggca ggcagattgc ttgaaccctg gagtctcgag 290
```

<210> 1866

<211> 305

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (16)

<400> 1866

```
gaattcggcc aaagangcct acgaggaatg tggatatctg actagattaa aagggttaaag 60
aactgtttta agttggataa gataaagaca aagggtttaag caagttgtgg aagggtgatt 120
gtaaaggaaa ttctgtgtgt aaacatactg gctgtagtta aaaaggggtat tgtccagttt 180
ttctgtaaat tgagcattaa aataaaaagca caatgggttt ctcttacagc actatcctgc 240
tttttttttg cttttttttt tcttttgaga cagagtctcg ctctgttgcc caggctggtc 300
tcgag 305
```

<210> 1867

<211> 202

<212> DNA

<213> Homo sapiens

<400> 1867

```
gaattcggcc aaagaggcct actcatcagc tttgatgatg agatcgatgt ccaccaaggg 60
cttgctctgc agaactggaa ctgggggggt ggctgggggc ccttctccca gtgacttgta 120
tgccttggct tgtgatgccc ctgcgagtag gggaggggtat ggggtgagtc cttccttgga 180
```


ggtcacccctg agtctgttct ca

202

<210> 1868

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1868

gaattcggcc aaagaggcct agtaatttcc ccttgaaaat tccctctgtt 60
cctccaaatc taattgctga taaatccctt tcagggtctct cttctataaa gtcttccaaa 120
acccagatag ccaaccacaa cccaccatcc ccttgaaatc ttgttgcctc catccatgcc 180
acacatctgg aatttgctat atctactggc atttgacatg tataaaatct atttctgccg 240
ggcgctcgag 250

<210> 1869

<211> 133

<212> DNA

<213> Homo sapiens

<400> 1869

gaattcggcc aaagaggcct acctaaaccg tcgattgaat tctttgtggc tacagatcaa 60
aaattcatac tgaaaaagat atttgtcatt taacatggaa cttttccaat acattttaag 120
aggcatactc gag 133

<210> 1870

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1870

gaattcggcc aaagaggcct agagaacaca gccagcaggt gcctataagc aagaaagtgg 60
gttctcacc aacatcgat ctgctgggtgc attgattgca gacttcccag actccagagc 120
tatgagacat aaatttctgt tgtgtataag ccatacagtc tatggtattt tggtacagca 180
gcctgaaggg actaagacac cttcctgttt tacagacaag atgcccacaa caccacaact 240
cgag 244

<210> 1871

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1871

gaattcggcc aaagaggcct attcaaatat ataggctaac tgcgtatatc ctcattagtt 60
catatcagtc tagttaatag caacgttagc caaattttta aataaaaaata actacattta 120
gaaagtgatt tattttcttt tcttttttct tttcttttct tttcttttct cttttcgtga 180
gatgggggtc cgctctgtca cccaggtctc agtgcagtgg cacgggtctca gctcactgca 240
acctctgact cctgagctcg ag 262

<210> 1872

<211> 418

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (48)

<220>

<221> unsure

<222> (65)

<400> 1872

```

gaattcggcc aaagaggccc acctaaacct tctccactaa acgtcgttag ggcctcagtt 60
ctagnacgag tcataacctga ttcacctgca ctgcttcccc cgtgtgctga gcatagagca 120
tacaatagcg cctacttcac ggaaacttgt gccttttaaac ttgttaaact taaacacagc 180
cgagaagttg cttcttttga cttttcttac ttttctact tttttgtaga aaaaaaagat 240
aatgcctctg cttctatttc tctgggggtg ggggtggggg ccgggagccg tcgcagaccc 300
gtttcatgca gcgtctccct cggcaccgcg ttccggaggac gcaccctcac tcccctgctg 360
ccttcactcc tttctgacca agcaacgcta acttttgtac agatcgattt gactcgag 418

```

<210> 1873

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1873

```

gaattcggcc aaagaggcct aaatttagcc ataagactaa ataataagat gccactattg 60
tatttgaacc attctgggtt cttttcttct tcttttaaat cgcaaagtcc agctatgtca 120
gtattcctgc tctcgtctct gttggcagta ttaaaatcaa ctttaccctc cgag 174

```

<210> 1874

<211> 229

<212> DNA

<213> Homo sapiens

<400> 1874

```

gaattcggcc aaagaggcct aaggagccag cttatcagtg tggagaagat tgcagctgca 60
atttgctggt tagtctctgt tcttttaacg ctttcctgaa gtgccatttt gtctcggtaa 120
aatgctccct gaaaatactc aaatattttt agttgtagag tacaaatcag attgagctgc 180
acatttcctt ggtgagcaaa agtgatgagt ttgtgttcat taactcgag 229

```

<210> 1875

<211> 191

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (90)

<400> 1875

```

gaattcggcc aaagaggcct agtcatttcc tgaggatggt ccagtggtct agtgcgtgtg 60
tgtgtgtgtg tgtgtgtgtg catgtgtgtg tgtgtgtttt aataaattgg aagcaagaac 120
atttgatgtt catgaagtta cacttattta ttacggaaaa caaaaagaca gctttacatc 180
ataacctcga g 191

```

<210> 1876

<211> 277

<212> DNA

<213> Homo sapiens

<400> 1876

```

gaattcggcc aaagaggcct actgagcctc agttttctct tctgcatagt gagactaaaa 60
tagtactgcc ccatgtggtt gttgggaaga cgccataaga taatagatgc aacatcttag 120
tgcctcagct gagcgcttag tttatgccag ctggcactgt tgggtttaac tgcgtatttg 180
ttgtatgact gtcacttcga cagcctgtac cctccttgag ggcagagact ttgtctcagt 240
cacataaaca tttgatggaa agaaggtaaa tctcgag 277

```

<210> 1877

<211> 203

<212> DNA

<213> Homo sapiens

<400> 1877

```
gaattcggcc aaagaggcct atttcaagat tgtaaattg agacaagtaa ttgaataatt 60
tgtcttattt ttattttaaa aaaagtgaat ggactgaaat gttaaatgtg aatgtacatt 120
tcttaattgc aacttttcta ctgagtgttt gcactatact ttctggaatc ttatttaaca 180
aaaataataa agggaagctc gag 203
```

<210> 1878

<211> 254

<212> DNA

<213> Homo sapiens

<400> 1878

```
gaattcggcc aaagaggcct acccacgggt cccaagggtgc ctttctgtgg accaggcgag 60
caggttccag gccctgattc cctgaccctg ggggacgaca gcatccgtag cctggacttt 120
gtgtccgagc cgagcctgga cctccctgac tatgggccag ggggcctgca tgcagcctac 180
ccgccatccc caccgctcag cgctctctgat gccttctcgg gcgctttgag ctccttgagc 240
ctcaaggcct cgag 254
```

<210> 1879

<211> 229

<212> DNA

<213> Homo sapiens

<400> 1879

```
gaattcggcc aaagaggcct aggaagataa gtgtgtgtat agatttttta aagattgggt 60
tataaattga taattgttaa agtaggttga taggtatatg ggagtttatt atactatccc 120
acttttacgt gtgtttgaaa aaattttttt taaatcgttg tttttttccc ccttttgctt 180
tctaggattc ttacagaagc agagattgat gctcaccttg ttgctcgag 229
```

<210> 1880

<211> 247

<212> DNA

<213> Homo sapiens

<400> 1880

```
gaattcggcc aaagaggcct aaatgaatgt caaaggaaaa gtaattctgt caatgctggt 60
tgtctcaact gtgattcattg tgttttgga atttatcaac agcacagaag gctctttctt 120
gtggatatat cactcaaaaa acccagaagt tgatgacagc agtgctcaga agggctgggtg 180
gtttctgagc tggtttaaca atgggatcca caattatcaa caaggggaag aagacataga 240
gctcgag 247
```

<210> 1881

<211> 248

<212> DNA

<213> Homo sapiens

<400> 1881

```
gaattcggcc aaagaggcct acttcctttt cccctaagt taataggaca gagatatcat 60
atccttttct ctattctttg ataattcctc cctgtttttt tccctttctt tttctagaac 120
tcctatcagt cacaagttaa aggtcctaaa ttgacctaat gactctttct ttttactcat 180
atcttctgtc tcttttattt tgttctagtt tcggcttttt aaaattttat cttccaactc 240
cgctcgag 248
```

<210> 1882

<211> 179

<212> DNA

<213> Homo sapiens

<400> 1882

gaattcggcc aaagaggcct acaggtgtac accaccacat ccagtttata agctttttct 60
 tattaaaaaa agtttttttt ttttaagtttt ctgttaaaaa ctaagacaca aacacataca 120
 ttgacctagc cccacacagg gtcctgatgg tcagtatcac tgtctttctac ctctctcgag 179

<210> 1883

<211> 206

<212> DNA

<213> Homo sapiens

<400> 1883

gaattcggcc aaagtgccta cacgtatatt ttcaaggact cactcttaga aacaaaaatg 60
 tcatactttc atacttcatt ttgtgggtgt cttacatttt tttttttttt ttttttttct 120
 ctaatttaac ctttatggaa gcttttaaagt ttgtgcaaaa catgagtgtc ttgcccatca 180
 gtgaatggaa tggaccgatg ctcgag 206

<210> 1884

<211> 193

<212> DNA

<213> Homo sapiens

<400> 1884

gaattcggcc aaagaggcct actatacacg aggcaccagg ccaactccag tgacaacaat 60
 ttgcaaactc caagcactga tctccagtgt gtgcttgatc tgggtgtgtgt gtgtgtgtgt 120
 ctgtatatac attcccagga gcacacacat ggacaagtta ctacagcccc cgctcccaag 180
 tccaccactc gag 193

<210> 1885

<211> 238

<212> DNA

<213> Homo sapiens

<400> 1885

gaattcgcgg ccgcgtcgac ccttgccaggc attactaaat cgcttccttc acccaaaaca 60
 tatcatggcc atgagttgtg actgccagg aatgtgcctt gctagtttga agatgcagtt 120
 gattttatta ttttattatt ttattttatt ttttgagaca gagtgtcaca ctgtcgccca 180
 ggcctggagtg cagtggcacg atctcggctc gctgcgggct ctgcctcccg ggctcgag 238

<210> 1886

<211> 715

<212> DNA

<213> Homo sapiens

<400> 1886

gaattcgcgg ccgcgtcgac cacatgaact gagcaaatga gatagaaaca tggcattctt 60
 aattatacta attacctgct ttgtgattat tcttgctact tcacagcctt gccagacccc 120
 tgatgacttt gtggctgccca cttctccggg acatatcata attggagggt tgtttgctat 180
 tcatgaaaaa atgttgcctt cagaagactc tcccagacga ccacaaatcc aggagtgtgt 240
 tggctttgaa atatcagttt tctctcaaac tcttgccatg atacacagca ttgagatgat 300
 caacaattca acactcttat ctggagtcaa actgggggtat gaaatctatg acacttgtag 360
 agaagtcaca gtggcaatgg cagccactct gaggtttctt tctaaattca actgctccag 420
 agaaaactgtg gaggtttaagt gtgactatcc cagctacatg ccaagagtta aggctgtcat 480
 aggttctggg tactcagaaa taactatggc tgtctccagg atgttgaatt tacagctcat 540
 gccacagggt ggttatgaat caactgcaga aatcctgagt gacaaaattc gctttccttc 600
 atttttacgg actgtgcccc gtgacttcca tcaaattaaa gcaatggctc acctgattca 660
 gaaatctggg tggaaactgga ttggcatcat aaccacagat gatgacgtcc tcgag 715

<210> 1887

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1887

```
gaattcgcgg ccgcgtcgac attgaattct agaccatggc cctgtgcttt gtcattctct 60
ccttctgcag cctcctgctg tttatctgtg ttggaagaaa tgtgctcact ctgttactct 120
tcattgcaag agcgtttatt tctggaggct ttcaagcggc atatgtttac acacctgagg 180
tctaccccac ggcaacgcgg gccctcggcc tgggcacctg cagcggcatg gcaagagtgg 240
gtgctctcat cactccgttc atcgcccagg tgatgctgga atcctctgtg tacctgactc 300
tggcagttta cagtggctgc tgccctcctg ctgccctggc ctctgcttt ttgcccattg 360
agaccaaagg ccgaggactg caggagtcca agccactcga g 401
```

<210> 1888

<211> 248

<212> DNA

<213> Homo sapiens

<400> 1888

```
gaattcgcgg ccgcgtcgac ctctatctca aaaaagtaaa aataaataaa taaatttcct 60
gttttaattt ctaatgtgat aaacataata ggtatgtgcc actgcactcc agcctgggtg 120
acagagggag attccatctc aaaaaaagta aaaataaata aatttcctgt tgtaatttct 180
aatgtgataa atataatagg tataatgcat gttaactaaa gcattttaga gtctcagtag 240
gtctcgag 248
```

<210> 1889

<211> 222

<212> DNA

<213> Homo sapiens

<400> 1889

```
gaattcgcgg ccgcgtcgac ggatatttgt ttttttgggc gcgacacaaa tcgagggtgag 60
ggaagagaga ggaaaatccc ctgaatccct gcaggattaa tttattcaaa aaggaaataa 120
aaaatactca atatgcaaaa gtcttgtgaa gaaaatgagg gaaaaccaca gaacatgcca 180
aaggccgagg aagatcgccc tttggaggac gacgcactcg ag 222
```

<210> 1890

<211> 361

<212> DNA

<213> Homo sapiens

<400> 1890

```
gaattcgcgg ccgcgtcgac ggattataat cttctggacc acctttgtat atatagtcct 60
ttcaggtcat atggctcagg actgtagttt gaacccatgt ttctcatttt ttttgtttgt 120
ttgttttttg agacagagtc tcgctgtgtc gcccatgctg gagcgcagtg gcgcggtgtc 180
ggctcgctgc aacctctgcc tcccgggttc aagcgattct cctgcctcag cctcccgagt 240
ggctgggatt gcgggcgcgc accaccacgc ccggataatg ttttgatttt tggtagagac 300
gggggtttcac catgccgtcc aggcctggtct cgaactccca acctcaggtg atccactcga 360
g 361
```

<210> 1891

<211> 230

<212> DNA

<213> Homo sapiens

<400> 1891

```
gaattcgcgg ccgcgtcgac gccaaaggact taaatccagg actaccagct ctaaggctgg 60
ctctgccttg gagtatttgt gtatttagaa catttacatt taatgtaatg attgagatgt 120
tagggcttaa gtccaccatt ttatttatta ttttctcttc cctctccctt ctgtcctcac 180
cctgttatcc tcagagggag aaaacacaga agagaggcac aaagctcgag 230
```

<210> 1892

<211> 224

<212> DNA

<213> Homo sapiens

<400> 1892

```
gaattcgcgg ccgcgtcgac attcctaaaa ttctaagggt ttatgatctc tgcatagatc 60
agtatctttt gatctgaatg aatcaatatg aagatctttc tttcttttct tctttttttt 120
tttttttttt tttttttttg agacgggggt ttgctcttgt caccacagggt ggaatgcagt 180
ggtgctatca cagctcactg cagtcctaaa ttcttggaact cgag 224
```

<210> 1893

<211> 709

<212> DNA

<213> Homo sapiens

<400> 1893

```
gaattcggcc aaagaggcct aatctaattg cgatgtagtt aattggcttg gtgtgtttat 60
ggctctttat cctaaagtat atatttaagt acctaaaagg atcagttaat tattttttct 120
ttgagttgtt tctggaaaat tgtgtagaat aaaaatatct caaaatatat gtgtccttta 180
atattaaagc acttttgtaa agtatataac atttcttgg tttgctactt atcacttttt 240
aagggggatc tgttgctttc cattactaga tttttaagaa ttatactcta ttaattggct 300
tttaaaaaac tctaacattt tatttgcaga ttaataagag gagtatagaa aaatttgta 360
aacatatatt caagtgtttt cctctccctt atcactatgc acaagagtgt tcacatatat 420
aggcactata tatactattt gttggatggc tgttggaatg ggtgggtaag tggatgagta 480
aataatatat tcagatttgt tgtatattat atacatgtaa tatacataaa aacaaatatg 540
tatatatatt gtgtgttttg aatacttttg ttaagtggct tccaaagtat gtgtataaaa 600
aaccttctgc acaaaaagggt ctccatagcc aaatagattt ggaatgtga tatattattt 660
ttatgtcaag aaattcttaa tatagattaa cacgttaaat attctcgag 709
```

<210> 1894

<211> 578

<212> DNA

<213> Homo sapiens

<400> 1894

```
gaattcggcc aaagaggcct attgaggaac tgcctacag tgaagagac tatgtacgaa 60
ctgggtgcag tgcagtgatc tttttgtca taatgttatt ggggcaactg atgaaaactt 120
gaatgggggg gtctctggat tctttgtatt atatatagga gttctttgta ttattgttgg 180
aactttatta caagtttgca atgatttcaa catagaaaag gataccatta agagaatgga 240
aagcaacagc aaaatcctga tggaaagggg ccagtagcga gggaaagact aaaaagagtt 300
agaaagcagg gaggtagttg agagggcaag gtctctggga ggtaggagat aagaagagga 360
tggaattcact ttgggatggg gggctctgtt ttcgttgtaa tagtggtgaa agataacaca 420
tgaggagaaa ggatgcagct tgaggatgga ggtaattttg aaggtctcta ggaccattta 480
aagtatatatt tctttctata agactggcaa acacttttgt cagtggagtt ttagggtgaa 540
aaagtaagcc tgagaaagaa agctaggagg tgctcgag 578
```

<210> 1895

<211> 258

<212> DNA

<213> Homo sapiens

<400> 1895

```
gaattcggcc aaagaggcct atgattttcc aatattaccc atattttttt gctagtattt 60
tttagtaaag aagagcttca tctctctccc acctgttag taacactgtg gactcctgga 120
tttcttttca gttcagtgat taccattcag tgtgttgta tggacatcac tgtgcctatt 180
gatgcactaa ttgtcccaa tctgacgatg ggagcccttt caagcttgct tttctgttct 240
tttgcgcact cactcgag 258
```

<210> 1896

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1896

```

gaattcggcc aaagagacct acgggcatgg tagcagggtgt ctgttatccc agttaggagg 60
ctgaggcaag agaattctctt gaacctgaga ggcggagggt gcagttagcc aagatcgcg 120
cattgcactc cagcctgggg gacaagagtg agacttagtc tcaaaaaaaaa aaaaaaaaaag 180
aaaaaaaaat cagggatata gttcatatcc cacttctttg ttacaccga tgtccctgaa 240
taccagcctg tagctaattg acttgggatt tctggtctaa gtgggcctcc tggggatggg 300
gtggtacact gagcttctga gcctcattgt agagtagaaa ggtactgggg cctgtgtggt 360
aagccttggt gaaatgctct ggtattcagt attgccttaa taaacttcac ccagcaactc 420
gag 423

```

<210> 1897

<211> 182

<212> DNA

<213> Homo sapiens

<400> 1897

```

gaattcggcc aaagaggcct aatagaagtg agcaaaacaa aaatcccggg ccttgtggag 60
ctgtattttt gatgagaagg aggaattcaa attttaaact tctgttaaac gatattttat 120
ttccttattt gatttttatt ttgagaccga gtcttgctgt tgcccatgct ggagtgtctg 180
ag 182

```

<210> 1898

<211> 281

<212> DNA

<213> Homo sapiens

<400> 1898

```

gaattcggcc aaagaggcct attgaaacag acgtctgcaa acagaggact ggttttacca 60
tggtggccca gctggtcttg atctcgtaa catggtttta ccatgttggc caggctggtc 120
ttgatcttgt gacctcagggt gatccgctg cctcgccctc ccaagggtgt ggggtttata 180
gggtgtgagcc accgtgcctg gctgaagtgt acatgtgttt aaatgagatg ctgaaagatg 240
aaaagaaggg gtgcatgaac aagagtgggg ctgggctcga g 281

```

<210> 1899

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1899

```

gaattcggcc aaagaggcct atgaagatct ctattcttat gtgtctcagc ttggggctgg 60
tgggactttc cttctgtggg gcggatgtgg gtggcttctt caaaaaccca gagccagagc 120
tgcttgtgag ctggtaccag atgggtgctt accagccatt cttccgggca catgcccact 180
tggacactgg gcgacgagag ccatggctgt taccatctca gcacaatgat ataatccgag 240
atgccttggg ccagcgatat tctttgctgc cttctggta caccctctta tatcaggccc 300
atcggaagg cattctgtc aagctcgag 329

```

<210> 1900

<211> 163

<212> DNA

<213> Homo sapiens

<400> 1900

```

ggggattaca ggcagtagcc accgtgcccg gcctgcatcc attatttctt atcagatatt 60
ctgcgttctc ttctttttgc tcgtgccat tgcttactc tccaggctgc ttcattctcat 120
agactattgt cacagccatg tcaacttccc caggccactc gag 163

```

<210> 1901

<211> 212
 <212> DNA
 <213> Homo sapiens

<400> 1901
 gaattcgcgg ccgcgtcgac cgaagggctc gaaaccaca cattcgtctt aaattttctg 60
 aaattttattt acttggttta aatatgatga taagagccgc ccacctgcat gggcttctgt 120
 ccttgctttt aatgtggatt tatgccactg atctgcattt tggacatcat aagaaatact 180
 gctgtgcttc cctacaccc acccaactcg ag 212

<210> 1902
 <211> 195
 <212> DNA
 <213> Homo sapiens

<400> 1902
 gaattcgcgg ccgcgtcgac cctaaagtta ctgctgacct tgaagcattg ttaaagacta 60
 atgtcctctc ctccactggt gaggtcggct gcttctggag gctactttgc actcttcctc 120
 ttctcctttt tccgcacttc tccacccctc ccacatttac agccagaatc aacattccct 180
 gggcccatc tcgag 195

<210> 1903
 <211> 275
 <212> DNA
 <213> Homo sapiens

<400> 1903
 gaattcgcgg ccgcgtcgac ctgcaaacga tcaatcttct cttaaatagg tttaaaatgc 60
 tacctgaagt tctatatcgt atcttcacac ttgaaacaat tctgattagt aataatcagg 120
 ttggatctgt ggaccctcag aaaatgaaga tgatggaaaa tctgaccacg ttggaccttc 180
 aaaataatga cctcttaca attccaccag agctcggtaa ttgtgtaaac ttaagaacat 240
 tactactgga tggaaatcca ttccgacatc tcgag 275

<210> 1904
 <211> 153
 <212> DNA
 <213> Homo sapiens

<400> 1904
 gaattcgcgg ccgcgtcgac gcagattgta cagaaagcta ccctagagtc cctgttggtg 60
 gggaattgcc aacgtatttt ctgcctcggg aaaacaaagg actcaggatc cacgaactca 120
 gcagtgatga ttattctaca gaagatactc gag 153

<210> 1905
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 1905
 gaattcgcgg ccgcgtcgac caggatatca agttttacaac aatactaagt agtcttcagg 60
 gcttttttga gagagtttta gacatcatag aagaacaaat taaatgccta aaggacaatg 120
 aatctacttg tgttgctgac catatcaaca tggttttcaa aatacagcgc cctcgag 177

<210> 1906
 <211> 156
 <212> DNA
 <213> Homo sapiens

<400> 1906
 gaattcgcgg ccgcgtcgac ggtatctgta tatctttcct tttgtttaca actgttaaaa 60

aacctcaaaa tagttctctt caaaagaaga gagattccaa gcaacccatc tttcttcagt 120
atgtatgttc tgtacatact tatcggtgcg ctcgag 156

<210> 1907
<211> 202
<212> DNA
<213> Homo sapiens

<400> 1907
gaattcgcgg ccgcgtcgac acacccttg cctcttaaatt cacagctcaa gaattgaccc 60
tggatcctat ccgcatactt tccagcctct gtctgtgac actaacatac cctccctcat 120
gcatgtatct ctgtcattgg ggatactctg tgtacatgtc tcatttgtct acatcatgat 180
ctacttccta caacatctcg ag 202

<210> 1908
<211> 156
<212> DNA
<213> Homo sapiens

<400> 1908
gaattcgcgg ccgcgtcgac gatgcaagga catacgggac gggtattaaa gtctctgtgc 60
ttcatcagtc tttccttctt gttgctgcac atcattttcc acatcacgtt ggtgagcctt 120
gaagctcaac atcgattgc acctggcacc ctcgag 156

<210> 1909
<211> 180
<212> DNA
<213> Homo sapiens

<400> 1909
gaattcgcgg ccgcgtcgac ctggattaca aggaattctt tgtagaaaat atcttgaaca 60
ttttttgcct ttcttagtaa gtttgcccaa ttataaaagt tacagctttt gggccagatg 120
tggtggctca tgcttgaat cctagcactt tgggaggctg aggcaggcgg atcactcgag 180

<210> 1910
<211> 297
<212> DNA
<213> Homo sapiens

<400> 1910
gaattcgcgg ccgcgtcgac gatacttgag gtaagaaacg ttttactat gactgcgaaa 60
gaggggaagaa agaaatcgat ccgtgtcttg gtggctgtgg ggaacggaaa aggagctgca 120
ggtttttcta ctgggaaagc tactgatcgg atggatgctt tcaggaaagc aaagaacaga 180
gcagttcacc atttgcatta tatagaacga tatgaagacc atacaatatt ccatgatatt 240
tcattaagat ttaaaaggac gcaatctccg tcgattgaat tctagacctg cctcgag 297

<210> 1911
<211> 319
<212> DNA
<213> Homo sapiens

<400> 1911
gaattcggcc aaagaggcct acaggagttg tgagtttcca agccccagct cactctgacc 60
acttctctgc ctgccagca tcatgaaggg ccttgacgct gccctccttg tctcgtctg 120
caccatggcc ctctgtcctt gtgcacaagt tggtagcaac aaagagctct gctgcctcgt 180
ctatacctcc tggcagatcc caaaaagtt catagttgac tattctgaaa ccagccccca 240
gtgccccaaag ccaggtgtca tctcctaac caagagaggc cggcagatct gtgctgaccc 300
caataagaag tgggtccag 319

<210> 1912

<211> 635
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (460)..(461)

<400> 1912
 gaattcggcc aaagaggcct agaagagcaa gcgccatggt gaagccatca ttaccattca 60
 catccctctt attcctgcag ctgcccctgc tgggagtggt gctgaacacg acaattctga 120
 cgcccaatgg gaatgaagac accacagctg atttcttctt gaccactatg cccactgact 180
 ccctcagtggt ttccactctg cccctcccag aggttcagtg ttttgtgttc aatgtcgagt 240
 acatgaattg cacttggaac agcagctctg agccccagcc taccaacctc actctgcatt 300
 attggtacaa gaactcggat aatgataaag tccagaagtg cagccactat ctattctctg 360
 aagaaatcac ttctggctgt cagttgcaaa aaaaggagat ccacctctac caaacatttg 420
 ttgttcagct ccaggaccca cggaaccca ggagacaggn nacacagatg ctaaaactgc 480
 agaatctggt gatcccctgg gctccagaga acctaacct tcacaaactg agtgaatccc 540
 agctagaact gaactggaac aacagattct tgaaccactg tttggagcac ttggtgcagt 600
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<210> 1913
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 1913
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 ccgaccacgt ttcttgagc aggttaaaca tgagtgtcat ttcttcaacg ggacggagcg 180
 ggtgcggttc ctggacagat acttctatca ccaagaggag tacgtgctgct tgcacagcga 240
 cgtgggggag taccgggagg tgacggagct ggggcggcct gatgccgagt actggaacag 300
 ccagaaggac ctcttgagc agaagcgggc cgcggtggac acctactgca gaacaactct 360
 cgag 364

<210> 1914
 <211> 159
 <212> DNA
 <213> Homo sapiens

<400> 1914
 gaattcggcc aaagaggcct aggcgtaatc tgtcataatc ttcttgcca gctgtatccc 60
 ataagcccag attcaccggt ttccatctc ccataacatt ggcagaataa ttgtcaaaga 120
 cagtagggat atattctcca ggaaatgcat tggttgtgg 159

<210> 1915
 <211> 470
 <212> DNA
 <213> Homo sapiens

<400> 1915
 ggaatcggcc aaagaggcct agttttgggt cgataggaga aatcattatc ctttatttgc 60
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 tgtcatgctg agcttcttca tttgtatggc atttatattt tagcactggt ttattattgc 180
 cttctgtatc agcatgttca acattttctt caaatataac acaggtccct agagtgtctt 240
 catactcccc agcaaaagaca cagctgtcca cttgcagaat gggcctctca gtgtcaatgc 300
 ccaaaaacctt gcattttatt tcacattttg agaggaagtc tgaatcaata attcctgata 360
 attccaccag aaccaactgc tctctctctt cctcgtcttc tccgtcctct gggactccgc 420
 tcgtccgcgc ccgcccgcct ggtcccgcgc cgcctcgtag cctcttttgc 470

<210> 1916
 <211> 402
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (128)

<220>
 <221> unsure
 <222> (288)

<220>
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<220>
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 <222> (336)

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 <222> (368)

<220>
 <221> unsure
 <222> (375)

<400> 1916
 tagatgcagc tcttttcatt ttggcatcct ttccagctc catgatgggt ctgcagggtt 60
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 tccaggggnag ggccactcca gagaattacc tttccaggg gacggcagga atgctacggg 180
 tttaaatggga cacagcgctt cctggagaga tacatctaca accgggagga gttcgcgcgc 240
 ttgcacaccg acgtggggga gttccggggc gtgtcggagc tggggcgnc cctccggag 300
 tactggaaca ccagangga catcctggag gagaancggg cagtgccgga caggatgtgc 360
 agacacanc t acganctggg cgggccccatg accctcacag aa 402

<210> 1917
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 1917
 gaattcggcc aaagaggcct atgtgcatat tgctagctca tggccaacat ttgtttacag 60
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 caaagtacat gttaccacat ccccgaaagg cttcctgctt cctgccattt cctgctcagt 180
 cctgcccattg catatctccc agcactgccc ctccctgtct gcacctggag cccaggagag 240
 gaggcctcag ctgagcctgc atctctaggg aagaatcctg gtccccggat ccacctcctt 300
 cctggccctt gctccatgca gctcccaccc agtcccagatt tcctgacctt tgctccctgc 360
 agtcccagct cccaccggcc g 381

<210> 1918
 <211> 164
 <212> DNA
 <213> Homo sapiens

<400> 1918
 ggatgatgac gtttttacaa cagctacaga cagttcttct aattcctctc agaagagaga 60
 gcaacctact cggacaatct cctctccac atcctgtgag caccggagga tttataacct 120

ggggccacctc cactgactcat accccacaga ccactattct cgag

164

<210> 1919

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1919

gaattcggcc aaagaggcct agacctgacc tgccatctgg agaaacctgc caaatatgat 60
gacatcaaaa aggtgggtgaa gcaggcgta gaggggccct caagggcac tcgggctaca 120
ctgaacacca ggttggttcc tctgacttta acagtgcac tcaactctcc actttcgatg 180
ctggggctgc cattgccctc agtgaccact ttgtcaagct catttcctcg tacaacagtg 240
aatttggtcta cagcaacagg gtggtggccc atatggcctc caaggagtaa gactgctcga 300
caaccagccc cagtgcagac acaagaggaa gaaagagacc ttcagcttct gggcagtcgc 360
tgccatgctc agtccccac cactctggga atctccctc ttcacagttt ccatgcagac 420
cccacaactc gag 433

<210> 1920

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1920

gaattcggcc aaagaggcct aggggagatc tggatggcat ctacttcgta tgactattgc 60
agagtgccca tggagagcgg ggataagcgc tgtaagcttc tgctggggat aggaattctg 120
gtgctcctga tcatcgtgat tctgggggtg cccttgatta tcttcacat caaggccaac 180
agcagggcct gccgggacgg ccttcgggca gtgatggagt gtcgcaatgt caccatctc 240
ctgcaacaag agctgaccga ggcccagaag ggctttcagg atgtggaggc ccaggccgccc 300
acctgcaacc aactgtgat ggccctaatt gcttccctgg atgcagagaa ggcccaagga 360
caaaagaaag cagtggagct cgag 384

<210> 1921

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcggcc aaagaggcct accaaaaaag aacaattttt ttttttaaat tagccagggtg 60
tggttgggtg cagtggctca cactgttaac cctagcactt tgggaaggctg aggcggggcg 120
atcacttgag gccaggagt tgggaccagc ctggccaaca tggcaaaacc ccgtctttac 180
tgaaaataca aaacttagcc aggcattggtg gcgcacatcc gtggtcccat ctactgggga 240
ggctgaggga ggagaattgc tcaaaacttg gaggccggag gttgcggtga gccatgatgg 300
caccactgtc ctccagcatg ggcaacagag caagaacctg tctcaaaaga aaacaaaacc 360
aggtgtgatg gcactcgag 379

<210> 1922

<211> 491

<212> DNA

<213> Homo sapiens

<400> 1922

gaattcggcc aaagaggcct aagtttatcc aaatcctttc tcatcatatt tattatgtca 60
acctgtactt ccttttccct ctctctctcc ctcttttctc tccctctccc tctctctctc 120
ttccttcccc ccttcagggt accctagatg aacctaggga ggtcctggct acacagccat 180
tctgtctgag agagtctgag gactctgaga cccagccttt tgacacgcac cttgaggcct 240
atggaccttg cctgtctcca cctagggcaa taccaggaga ccaacatcca gagagcccag 300
ttcacacaga gccaatggg attcaaggca gagggaggca gactgtggat aaagtcattg 360
gtataccaaa agaaacagca gagagggttg gccctgagag agggccattg gagagagaaa 420
ctgagaaact gctaccagaa agacagacag atgtgacagg agaggaagaa ttaaccaagg 480
gaaaactcga g 491

<210> 1923
 <211> 524
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (248)

<220>
 <221> unsure
 <222> (299)

<400> 1923
 gaattcggcc aaagaggcct atgtgggttt gttttttctt tccctttttt gttcctccaa 60
 acaaaaacaa aatgcaggcc gagcgcggtg gctcacgcct gtagtcccgg cactttggga 120
 ggccgaggcg ggcggatcgt gaggtcagga gatcgagacc atcctggcta acacggtgaa 180
 gccccgtctc tactaaaaat gcaaaaaatt ggctgggtgt ggtggcgggc gcccgtagtc 240
 ccagctantc aggaggctga ggcaggagaa tggcatggac ctgggaggca gacttgcant 300
 gagccaggat cacaccactg cactccagcc tgggcgaaa agtgagaatc cgtttcaaaa 360
 aaaaaaaaaa tgcattgttt ataagccctg ctgtctagaa gtattgcgtt tagccatttt 420
 gagtacagca ttaaattgag gagtggggaa gagggaaaat cacttgattt ttgctgcaca 480
 ggatatttgc caaaaataaa tgagattttc tggggctcct cgag 524

<210> 1924
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1924
 gaattcggcc aaagaggcct agttttgttt ccccaaaata gaaagagatt ctctcctatt 60
 tcctgcctta cgttggcaag aggtgatcaa ggaactgggtg tacagtacac tgaacacagc 120
 tataccttgg gatgaggtgt caggtagca accaaggaca acccagctgc atgtcacact 180
 gtaagggaga tccatttct ttttcttttc ttttctttt ttttctttt tctttttttg 240
 aggtggagtc tcgttctgtc acccaggctg gagtgcagtg gcgcgatctc agcttaccgc 300
 aacctctgcc tgctgggttc aagcgattct cctgcctcag ccttctgatt agctgggatg 360
 acaggcgtgc accacgaggc caggctctcg ag 392

<210> 1925
 <211> 418
 <212> DNA
 <213> Homo sapiens

<400> 1925
 gaattcggcc aaagaggcct agactgcagc tcttttcatt ttgccatcct tttccagctc 60
 catgatgggt ctgcagggtt ctgcggcccc ccggacagtg gctctgacgg cgttactgat 120
 ggtgctgctc acatctgttg tccagggcag ggccactcca gagaattacc ttttccaggg 180
 acggcaggaa tgctacgcgt ttaatgggac acagcgcttc ctggagagat acatctacaa 240
 ccgggaggag ttcgtgcgct tcgacagcga cgtgggggag ttccgggagg tgacggagct 300
 ggggcggcct gatgaggagt actggaacag ccagaaggac atcctggagg agaagcgggc 360
 agtgccggac aggatgtgca gacacaacta cgagctgggc gggcccatga ccctcgag 418

<210> 1926
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1926
 gaattcggcc aaagaggcct aagaacacca actgctgagg ctgccttggg aagaggatga 60
 tcctaaacaa agctctgctg ctggggggccc tcgctctgac caccgtgatg agcccctgtg 120

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gagggtgaaga cattgtggct gaccacgttg cctcttgttg tgtaaacttg taccagtttt 180
acggtccttc tggccagtac acccatgaat ttgatggaga tgagcagttc tacgtggacc 240
tggagaggaa ggagactgcc tggcgggtggc ctgagttcag caaatttga ggttttgacc 300
cgcagggtgc actgagaaaac atggctgttg caaaacacaa cttgaacatc atgattaaac 360
gctacaactc taccgctgct accaatgagg ttcctgaggt cacagtgttt tccaagtctc 420
acgtgacact cgag                                     434

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<210> 1927

<211> 392

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (308)

<400> 1927

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gaattcggcc aaagaggcct actattcaaa tccttggcct atttttaaat tgaattgtct 60
ttgtattatc aagttgtaag agttctctag ataatctcga tagaagtccc ttgtcacata 120
tgcgatttgc atgtatttcc tctctttctg tgggtgtttg ttgttgttgt tgtttgtttg 180
tttttctgag acagagtctc gctctgttgc ctaggctgga gcgtagtggg gccatctcgg 240
ctactgcaa tctctgcctc ccgggttcaa gcaattctcg tgcctcagcc tcccaagtag 300
ctgggatnac aggtgcgcat caccacaccc agctcatttt tgtattttta gttagagacag 360
ggtttcgcca cttcagccag gctgggtctg ag                                     392

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<210> 1928

<211> 409

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (306)

<400> 1928

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gaattcggcc aaagaggcct actcgcgggg gtttattgta cagattattt cgtcaccag 60
gtactaagcc tagtacccaa tagttacttt ttctgatctt ctccctcctc ctaactcttc 120
accctcaagc agggcccagt gtctgttgtt tccctttgtg tccatgaatt ctcatatgat 180
gtctctctct ctttctctct ttctctctct cctttctctt tctttctctt tctttctctt 240
ttctctctct cttctctctc tctctttctt tcaattgaga cactgtcgcc aaggctgcag 300
tgcagnagca ggaatctcag tcaactgcag cctctgcctc ccagggttca gcgagtttcc 360
tgcctcagcc tccccagtag ctgggactac aggcacacac caactcgag                                     409

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<210> 1929

<211> 328

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (20)

<220>

<221> unsure

<222> (65)

<220>

<221> unsure

<222> (89)

<220>
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 <222> (102)

<220>
 <221> unsure
 <222> (106)..(107)

<220>
 <221> unsure
 <222> (109)

<220>
 <221> unsure
 <222> (132)

<220>
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 <222> (170)

<220>
 <221> unsure
 <222> (183)

<220>
 <221> unsure
 <222> (202)

<220>
 <221> unsure
 <222> (206)

<220>
 <221> unsure
 <222> (247)

<220>
 <221> unsure
 <222> (282)

<220>
 <221> unsure
 <222> (299)

<400> 1929
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 atggngctgtc tgtcaagcat gacatcctng cctgtgttaa gnttgngnt gctctcctgg 120
 gatgttgatc gngacgtctt gtccgggatt gagaagcttc tgttgctctn ctgggatgtc 180
 atncatgatc tctccatata tntgngctat agaaattggg ctctgtgaag aaatagtgtg 240
 tccaaancct tgggtacaggc cccctgggga gggtaccttt gnagaaccag aagttaganc 300
 ttgtgaagaa gaagaaagta ggctcgag 328

<210> 1930
 <211> 378
 <212> DNA
 <213> Mus musculus

<400> 1930
 gaattcggcc aaagaggcct acactctctt gtagtaacag aagctacctg ctataataaa 60
 gacctcaaca ctgctgacca tgatcagccc agcctggagc ctcttcctca tcgggactaa 120

aattgggctg ttcttccaag tggcacctct gtcagttgtg gctaaatcct gtccatctgt 180
atgtcgctgt gacgcaggct tcatttactg taacgategc tctctgacat ccattccagt 240
gggaattccg gaggatgcta caacactcta ccttcagaac aaccaaataa acaatgttgg 300
gattccttcc gatttgaaga acttgctgaa agtacaaaga atatacctat accacaacag 360
tttagatgaa ttctcgag 378

<210> 1931

<211> 272

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (184)

<220>

<221> unsure

<222> (261)

<400> 1931

cccactcccg cttcttatca agctgcttcc tttctccag cctctcctgc tttagcttct 60
cctctcctct ctcagctctt ttgtttttgg tgaggatggg ggctttgctt ttaggagtct 120
ttttgttaag gatttttggc atggcatctg ccagcctga attgggtcca gcactcgact 180
ctgnggcgtc ttcattgtct tctcacagg attcaacatt gtctcactg tctgcttctg 240
cagctccatc atctgagtgg ncccatctcg ag 272

<210> 1932

<211> 391

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (18)..(19)

<220>

<221> unsure

<222> (21)

<220>

<221> unsure

<222> (39)

<220>

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<221> unsure

<222> (52)

<220>

<221> unsure

<222> (66)

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<221> unsure

<222> (73)

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<221> unsure
<222> (115)

<220>
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<222> (142)

<220>
<221> unsure
<222> (151)

<220>
<221> unsure
<222> (170)

<220>
<221> unsure
<222> (184)

<220>
<221> unsure
<222> (202)

<220>
<221> unsure
<222> (208)

<220>
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<222> (213)

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<222> (297)

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<220>
<221> unsure
<222> (325)

<220>
<221> unsure
<222> (358)

<220>
<221> unsure
<222> (376)

<400> 1932

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aacagctcta tgtatgggnc nactactttg ttgtgcgna tagnctggag tntggacccc 60
cagatnccag tgnrtggccca gacacttccc cgctctcag taccaccacc acagnccggg 120
ccacaccctt caccagaaca gntctgcctg nagacaccac tccactccgn cggggacccc 180
tcancacaca cccagtgggt gncatcancc agntgggacc tganctgnct ccagccacag 240
ctccagcacc cagtaccgga aggcctccag cccccaatct gtatgtgtcc cctgagntnc 300
ttctgtgaac ccagagaggt ccgnggggtc cagtggccag ctaccaaca gggatatntg 360
gtggagagac ctggcnccaa gggaactcga g 391

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<210> 1933

<211> 421

<212> DNA

<213> Mus musculus

<400> 1933

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tagaaaaaaa aaaacaaacc ttcttactc cttaaagtga gagattcccc cccacccccg 60
ccccagaatc gtatattaat atctccacgt tgggaacgag ttgcatttct ttttttaaag 120
gaatccacgc cagggagcgt ttcttattgg gcattaaact tgcactgctt tgcacaagtt 180
tcgtattaaa acaactcta cctgaccgct ctgagaatta ctagtcttct ttttatata 240
attttttctt actttaata acaacatcaa cgtttcttcc ttttaaaaac atgcactact 300
gtgtgctgag cacttttttg ctctgcacg tgggtcccggt ggcgctcagt ctgttctacc 360
tgcagcacc tcgacatgga tcagtattat cgcaagagga tcgaggccat cccgcgggca 420
a 421

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<210> 1934

<211> 439

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (424)

<220>

<221> unsure

<222> (432)

<400> 1934

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tataaaggag gtgaatgtga gcccatgtcc caccgatccc tgtcagctgt acaaaggcca 180
gtcctacagt gtcaacatca cctttaccag cggcactcag tcccagaaca gcacggcctt 240
ggtccacggc atcctggaag ggaatccgggt ccccttccct attcctgagc ctgacggttg 300
taagagtgga atcaactgcc ccatccagaa agacaaggte tacagctacc tgaataagct 360
tccggtgaag aatgaatacc cctctataaa actggtggtg gtatggtgac atgaagtga 420
ttngagttc tngctatat 439

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<210> 1935

<211> 374

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (139)

<400> 1935

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tgcaataaag tgaaaaggaa gatgatgata atgagaagag agaagatcca ggagataatt 120
gggaagaagg tggaggtgnc agtggagcag aaaaatcttc aggtccctgg aataaaaccg 180
ctccggtaca agcgcctcct gctccagtaa cagttacaga aaccccgag ccagcaatgc 240

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ccagtgggtgt attcaggcct cctggggcaa ggctaaccac aacaaggaaa acgccacaag 300
gaccaccaga aatatacagt gacacgcagt tcccatccct gcagtcact gccaagcatg 360
tagatagcct cgag 374

<210> 1936

<211> 364

<212> DNA

<213> Mus musculus

<400> 1936

tatgaaggaa gaacccatgg gactcccaag gcggctgctg ctgctgctgt tgctggcgac 60
tacctgtgtc ccagcctccc agggcctgca gtgcatgcag tgtgagagta accagagctg 120
cctggtagag gagtgtgtc tgggcccagga cctctgcagg actaccgtgc ttcgggaatg 180
gcaagatgat agagagctgg aggtggtgac aagaggctgt gccacacagc aaaagaccaa 240
caggaccatg agttaccgca tgggctccat gatcatcagc ctgacagaga ccgtgtgcgc 300
cacaacacct tgcaacaggc ccagaccgg agcccgaggc cgtgctttcc cccagggccg 360
ttac 364

<210> 1937

<211> 407

<212> DNA

<213> Mus musculus

<400> 1937

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ccaagttttc cctctgctcg gattgatact tagaatttct tacctacgtc atagctgctt 120
tctaaaaaca gaatttttta acacctctg tttgttctct tgggatagat taagggtggg 180
aaatgtgggc aagaaaagag atgacaaact gctctgctga agtttcatgg aaatctgact 240
tgagtgtttt tctctccatt tgctgtgttt atgtgaacag tgtgacacca tcaccaccac 300
aggctcgggt ctgtcctccc catatgctac ctgaagatgg aggctaattt tccctctctg 360
cccgtggcat tttgtcgctt atccagctct ctactcgtag ggcaaca 407

<210> 1938

<211> 300

<212> DNA

<213> Mus musculus

<400> 1938

taaagagctg cagtgttcgc gcttggtagc tgggtgcatcg gactcagctg gctttgtgtc 60
cctgaggctc accgaaaaaa actttctcag cctctgact ccagagagag agagagagag 120
gtactttttg tggtcaccga ctttgacccc tgcagaggct gagcgatggc gtctatggga 180
ctacagggtc tgggaatctc cttggcagtc ctgggctggc tggggatcat cctgagttgt 240
gcgctcccca tgtggcgggt gaccgccttc atcggcagca acatcgtcac ggcacagaca 300

<210> 1939

<211> 340

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (4)

<220>

<221> unsure

<222> (29)

<220>

<221> unsure

<222> (114)

<220>
<221> unsure
<222> (118)

<220>
<221> unsure
<222> (143)

<220>
<221> unsure
<222> (181)

<220>
<221> unsure
<222> (267)

<220>
<221> unsure
<222> (321)

<400> 1939
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ctcgggtgaag taatggtctg tctgtcaagc atgacatcct agcctgtgtt aagnttgngt 120
tgctctcctg ggatgttgat cgngacgtct tgcccggtat tgagaagctt ctgttgctct 180
nctgggatgt cacacatgat ctcttcatat atgctggcta tagaaattgg gctctgtgaa 240
gaaatagtgt gtccasaacc ttggtancag ccccccctgcg gaggggtacct ttgaagaacc 300
agaagttaga tcttgtgtag nagaagaaag taggctcgag 340

<210> 1940
<211> 523
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (12)

<220>
<221> unsure
<222> (42)

<220>
<221> unsure
<222> (87)

<220>
<221> unsure
<222> (158)

<220>
<221> unsure
<222> (412)

<220>
<221> unsure
<222> (450)

<220>
<221> unsure
<222> (465)

<220>
 <221> unsure
 <222> (468)

<220>
 <221> unsure
 <222> (471)

<220>
 <221> unsure
 <222> (473)

<220>
 <221> unsure
 <222> (500)

<220>
 <221> unsure
 <222> (509) .. (510)

<400> 1940
 ctcgagtgag gncgacgatt tagatgtaga gtctgacttc gncgatgccca gtatcaacag 60
 ctattctgtt tcggatgggt ccaccanccg cagtagtcgg agccgtaaga aactccggac 120
 cgctaaaaag aaaaagaaaag gcgaggagga ggtgactnct gtggatgggt atgagacaga 180
 ccaccaggac tattgcgagg tgtgccagca agggggagag atcatcctgt gtgatacctg 240
 tccccgagcc taccatattg tgtgcctgga cccagacatg gagaaggccc cggaggggcaa 300
 gtggagctgt cccactgtg agaaggagg gatccagtgg gaagctaagg aggacaattc 360
 tgaggggtgag gagattctgg aagaagtcgg gggggaccag aagaggagga tnaccatcac 420
 atggaattct gtcgcgtctg caaggacggn ggggagctcc tgtgntgnga nanaaacctt 480
 tcttccaacc acaaccactn tctaggccnn gtggggcgaa ttc 523

<210> 1941
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 1941
 gaattcggcc aaagaggcct aatggctcgc agacactgct tctcctactg gttactggta 60
 tgctgggttg tggtaactgt ggcagaagga caagaagagg tatttacgct tcctggagat 120
 tcacaaaata atgcccagcg taccgactgc cagatcttta cactcaccct tccacctgcc 180
 ccgaggagtc cggtcacaag ggcccagccc atcacaaaga caccaggtg tcccttccat 240
 tttttccac gaaggcccag actcgag 267

<210> 1942
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1942
 gaattcggcc ttcatggcct agcatgaagg aagaggtttg ggatatgagc aggtatgtga 60
 aataatgaat cagtatttct gtcaacttta gagagacctg ctgaaatccc caaattcact 120
 gtgattctcc aggaagtac cagggcctga gctaatagaca tggccaacag caagcctgca 180
 agatgaaagc agtttattaa tactcatacc attgaggatt ccaggaagga aagcagactc 240
 accagctgga ggtgggtggt ccagaacaac aggggaatgg caggaaacaa aagggaacaa 300
 ctcgag 306

<210> 1943
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1943

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gaattcggcc ttcattggcct aacttcctct ttggatctca atagtcacgt cttccttttc 60
caaactatag tagaatatta agtcctaaag gatttaattc taggagagag agtagttata 120
atggctgata tttaacagaa agtgatcaag agctatctcc cactgctagt gagaaaacta 180
ataactaaaa gaatggttga ctgatgagca ggtgactgac aggatcaaca aagtaacaga 240
aagtaaaacc taacacagga agaattctag gatttgtgta ggtaggccaa aaggtaaagg 300
ccaggcagtt attatagtc aagagtccaa gagtgtagtc agagtcagtc agaaaaacaa 360
actcagggtg acaaggggca ctcgag 386
```

<210> 1944

<211> 368

<212> DNA

<213> Homo sapiens

<400> 1944

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gaattcggcc ttcattggcct acagttcttcg ttctcttcgt ttttcagttt tgaaagtctt 60
tgttgatata tcttcaaaat cagagattct ttactctgat ttttatctat taatagacca 120
catacagtc attaatagtc ccattaaagg cattcttcac ctcttttgca gtgtttttta 180
atctctagca tttctttttg gttcttctt aggatttcca tctctttgct tacattaccc 240
actattgttg catgctgtct actttatcca tttagcgcct taacgtgtta atcatagttg 300
ttttaaatc cctgtctgtg tgttacatct ctgccatgct tggttctgat gctcacccta 360
atctcgag 368
```

<210> 1945

<211> 273

<212> DNA

<213> Homo sapiens

<400> 1945

```
gaattcggcc ttcattggcct agtggttagaa ctttaagatt tgaagcttta acgagagtca 60
gctagtctgc agtgattaga gacttgtaag ttaattgata tacacacttt tgtctatatt 120
tattaagttt ctcaggggaa ttgtagatta tttcagagtg cagtttttagg tcgtggatca 180
gatttaagtt ggaagtaaat aatggttatt actagaattt tttgtttttg tttgtttttg 240
agaaggagtc tttctctgac acccaagctc gag 273
```

<210> 1946

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1946

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gaattcgcgg ccgcgtcgac ctcagcgaat ctactgggaa aacaagatag ttcggataga 60
gaaggacaca gcagaggaaa ttaacaacat gaagaccaag ttttaagaaa caattgagaa 120
gtgtgataat ctagagcaca aactaaatga tctcctaaaa gaaaagcagt ctgtggaaag 180
aaagtgcact cagctaaaca caaaagtggc caaactcacc aacgagctca aagaggagca 240
ggaaatgaac aagtgtttgc gagccaacca agtcctcctg cagaacaagc taaaagagga 300
ggagaggggtg ctgaaggaga cctgtgacca aaaagatctg cagatcaccg agatccagga 360
gcattctcgag 370
```

<210> 1947

<211> 822

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (155)

<220>

<221> unsure

<222> (231)

<220>

<221> unsure

<222> (270)

<400> 1947

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gaattcgcgg cgcgctcgac gggcaatgtc ctgcgtgtgc tgggccagcg tacgattcag 60
ctgggtccaca tgggtccaca ggccctctct gggcctcagt ggctcagtgg gcaagctgtc 120
caggcccgcg gccagcaggg ccagcctcct gcacncaccc tccacttgtg ccaccccgcg 180
gtcaaagtgt cccactgtgt gctgaagttt ctgggctgtg tccctggcagc ngctcacccc 240
actggccacc ttggccacac cagccttgan ttgctccagc tccccacgca ggttcaggac 300
ctgcctgtgg ccagcctgaa gcctggagcc ttggctgtct acctgtcctt ggatggcctg 360
gacttcggct tccaccttgc gttcccgtc atccagggac gtgttggcag ccaagaaggg 420
atcagagtac tggctgacag agtcaactgag gcctgtgagc gacttgcctc ctgagttcag 480
attgaccttg agcagagtga tctcgccttg aagtgaagctg cccgtccctt ttgccagctg 540
tccttgagcc tcggccacag tgccattgag ctgctggagc agtgctgcgt ggctggccac 600
ctggcgtagg agggcctcgc tccggctctg ccaggccttc acctctgcca cgaggctgtc 660
caggatggct gaggtggtgc tcggggtgca cgaagtctcc agtgagacca accgttgctc 720
tagcacagcc agctctgtct gtacaagggg ccgagctgac ctgcccggag aggcgctgtc 780
atggcttagc tccccagcca atgttgctag gcgtcctcgt ag 822

```

<210> 1948

<211> 774

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (263)

<400> 1948

```

gaattcgcgg cgcgctcgac aggagtttga aaaacaagat gaattaaagc gatctgccat 60
gagagcagta gcagactgac taaccattcc agaagcagag aagagtcac tgatgagtga 120
attccagtca cagatcagtt ctaaccctga gctggcggct atctttgaaa gtatccagaa 180
agattcatca tctactaact tggaaatcaat ggacactagt tagatgtttg ttcacatgg 240
ggaccattac atatgacct acnatgcact gaattgacag gttaatcata agacatggaa 300
agagaagtgt ctaaaagctt caaaatgttc cacttttttt tccctcatgg agactgtttg 360
tttggctttc ttccattgtt gttttttag cttttatttc agaaatgtgt atttccataa 420
tccagagttt gtaaaaccac tagtgtttta gtggttacag caacatttga aatggaaact 480
aaaagttagg attttatgga gtatggagat aggggtccagt atctatttac cctgtaatgt 540
ttaggattaa aatgttaaaa ttttgtgacc atgaatttct ttcttttata aattttctca 600
tttaaaaatc aaaaatcttg caaaacaaaa accatgtttc tttttcttgt ataacttttt 660
gttttcagca acataaattg atttttagct ggcagacaag aatatccata taagatttgt 720
taaccatttc agagagtttg gcaattttta aaagataata aggtatcact cgag 774

```

<210> 1949

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1949

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gaattcgcgg cgcgctcgac caggaaacaa tggagaaact gacttggctg gcattctgaaa 60
ggcgcagtag tcaggagggt gactctgaag aagagaattc tcaggaggag aactctgagc 120
cagaagaaga ggaggagaa gaagcagaag gaattggaaag cctgcagaaa gaggatgaaa 180
tgacggatga agcagttgga gactctgtct agaagcctcc tacttttctg tcacctgaga 240
ctgctccaga agtgagagac agcagaactc caccaggaga gagcatcaa gctgctggaa 300
aaggccggaa caatcatcga gctcgcaaca agcggggaag tcgggctcgg gccagcaagg 360
acacctccaa gctgctgttg ctgtatgatg aggacattct cgag 404

```

<210> 1950

<211> 630

<212> DNA

<213> Homo sapiens

<400> 1950

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gaattcgcg cgcgctcgac tgagtatatt ccagggtacaa cctccttagg catgtctgtt 60
tttaacctaa gcaacgccat tatgggcagt gggatttttg gactcgcctt tgccctggca 120
aacactggaa tcctactttt tctgggtactt ttgacttcag tgacattgct gtctatatat 180
tcaataaaac tcctattgat ctgttcaaaa gaaacaggct gcatggtgta tgaaaagctg 240
ggggaacaag tctttggcac cacaggaag ttcgtaatct ttggagccac ctctctacag 300
aacactggag caatgctgag ctacctcttc atcgtaaaaa atgaactacc ctctgccata 360
aagtttctaa tgggaaagga agagacattt tcagcctggt acgtggatgg ccgcgttctg 420
gtggtgtag ttaccttttg cataattctc cctctgtgtc tcttgaagaa cttaggggat 480
cttggtctata ctagtggatt ttctctgagc tgtatggttt ttttcctaata tgtggttatt 540
tacaagaaat ttcaaatccc ctgcattgtt ccagagctaa attcaacaat aagtgcataat 600
tcaacaaatg ctgacacgtg tacgctcgag                                     630

```

<210> 1951

<211> 457

<212> DNA

<213> Homo sapiens

<400> 1951

```

gaattcgcg cgcgctcgac caaaaactga tagtatgcca gcaatgcagt tagcttctaa 60
agatcgagtt agtgaaagat cttcagctgg ggcacataaa acagattgcc tcaaaactagc 120
agaagccgga gaaactggaa gaatcatttt gccaaatgtg aattcagaca gtgttcacac 180
aaaatctgaa aaaaactttc aggctgtctc acagggcagt gttcccagtt cagtcattgtc 240
tgctgtaaat acgatgtgta ataccaaaac ggatgtaatc acatctgctg ccgatactac 300
cagtggttcc agctgggggt gtccagaagt aatttcctct ttatcaaata ccattttggc 360
ctctacatca tcagaatgtg tatcttcaaa aagtgtcagt cagccagtgg ctcaaaaaca 420
agaatgcaag gtcagcacca cagcaccaga gctcgag                                     457

```

<210> 1952

<211> 742

<212> DNA

<213> Homo sapiens

<400> 1952

```

gaattcgcg cgcgctcgac tgggtggatga aatgacatag gcttactagt cgctgaataa 60
tatccaattg ctctcttaaa tcgaataact ttgtcatctg ttctagactg tgaatgctgg 120
aaaacatctt tagctatggc atccaagtca gaggtgtcct gaatgttgcg tacatagtca 180
gcaacggctt tgatcactac gtcgcaaggt ggcaagacca gctggtgggc ccggaccttt 240
agtgaggcta gtggatgttc tggaccaagt aaactccaat gaaaggaagc cagatcttca 300
tcaggcagaa tgtgatttcc taagagagca gcaaaaatag gaaaacgatt tggattcagg 360
tccagttgct tggcaacttc atgcatcaga tattggcttg tggtagagact tttcccgctc 420
cggctcagtt ttagggcatg ggcactgaaa tagtagggga tgttgacacag tgcataatca 480
gagtcatacg caaccaagcc atggaaacca ttctctctgc agaaaccaat cacttctctga 540
tgggtatcct caatgctctg tgcaaccttg acgtggaagc ggatgagcgc caggcgggatg 600
cagtgggcca tgcagacggg cggcaggaac cagacctttg gcggcggggg gcccttggtc 660
tggacatggc tgacgattgc tgtgccgttt ggcgctcggt gccctgccgc ttgacctact 720
cgtgcagccg ggccttctcg ag                                     742

```

<210> 1953

<211> 222

<212> DNA

<213> Homo sapiens

<400> 1953

```

gaattcgcg cgcgctcgac gtggctgttg ggaatgttgg tttcttgga gaacgtgctc 60

```


agcgcggtct cgaactgcc a gtgggccgcc tgcagcagct gcttcgcctg gtcggccgcg 120
 cagccccgcg ccagcacgaa ctgggttgatc atgacctggg gccgcagctc gtccatgttc 180
 accgacatgg cgccggcgcg cgccggggccc ggcgacctcg ag 222

<210> 1954

<211> 527

<212> DNA

<213> Homo sapiens

<400> 1954

gaattcgcgg ccgcgtcgac gtgggattac aagcgtgagc taccacaccc ggccaattta 60
 tattttttagt agagatgggg tttggccatg ttgaccaggc tggctctgac ctccaggcaat 120
 ctgccccgct cagcctccca aagtgcctgg attacaggcc tgagtcactg cgcgcagcct 180
 gagatgtttt ttagatacac aaagtagaga tggtcagtga atactttgat gtgggtctac 240
 agtcagagaa gagttgctgg ctgaagatgt aaatttggtt gcatgttgat aggattttatt 300
 ttttattctt tttcttaaga gatggggtct cactctgtca ctgaggctgg agtgcagtgg 360
 cacaatcata gctcagtga gcctccaact cctagagtca agtgatcctc ctgcctaagc 420
 ttccagagtc gctggaatta caggcacgcc accatgcctg gctaattttt aaattttttg 480
 tagagggaaa agagggaaaa gaacaggccc taggactgag gctcgag 527

<210> 1955

<211> 530

<212> DNA

<213> Homo sapiens

<400> 1955

gaattcgcgg ccgcgtcgac aaggcgaaga atggcaaagg ctccgcagtc tcctggcccc 60
 gctcctctct ccgcctcaag cgcccgcccc ctacgcgga accctgaaca acgtagtctg 120
 cgaccttggt cgccgtctga ggcgccagcg gggacgtggc acggggccgc ccgccctggt 180
 tcgggacgtg gcgggggaat ttacaagtt cggactggaa ggtgagtcctc aggacagagc 240
 tgggcaggcg tcggggggcg cctaccagag cctcccgaa cctgacggc gccccctccc 300
 gacaaggcat cgccgcggtt ctgctcggct cgcgcttggg ctgcctggag gctcaagtgc 360
 caccgcgacac ggagaccttc atccgcgctg tgggctcggg gttgtgttcc acgctgttga 420
 ccatggcgat gcccactgg ctgcgccacc ttgtgcctgg gccctggggc cgcctctgcc 480
 gagactggga ccagatgttt gcatttgctc agaggcacgt gggctctcgag 530

<210> 1956

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1956

gaattcgcgg ccgcgtcgac caaatcaaag aagcatcgtg tcagaaacag gagaaaattg 60
 aagtcatgtc tttgggtcga tgtcaagata acacaactac aactactaag tctgaagatg 120
 ggcatattgc aagaacagat tatgcagaga atgctaaca attagaagaa agtgccagag 180
 aacaccacat acctgtccg gaacattaca atggcttctg catgcatggg aagtgtgagc 240
 attctatcaa tatgcaggag ccattctgca ggtgtgatgc tggttatact ggacaacact 300
 gtgaaaaaaa ggactacagt gttctatacg ttgttcccgg tcctgtacga ttccagtatg 360
 tcttaatcgc agctgtgatt ggaacaattc agattgctgt catctgtgtg gtggctcctc 420
 gcatcacaag gaaatgccc agaagcaaca gaattcacag acagaagcaa aatacagggc 480
 actacagttc agacaatata acagggggcg cctcagag 518

<210> 1957

<211> 189

<212> DNA

<213> Homo sapiens

<400> 1957

gaattcggcc aaagaggcct agggagctga atgaatgaat tagatttggg gttttttgtt 60
 gttttttgtt tgttttttga gatggagttt tgctcttggt gccccaggatg gattgcagtg 120

gcgcgatctc agctcactgc aagctctgcc tcccagggtc acgccattct cctgccccag 180
cacctcgag 189

<210> 1958
<211> 134
<212> DNA
<213> Homo sapiens

<400> 1958
gcctaaaccg tcgattgaat tctagacctg cctcgaggag cctctgagca ttttcctttc 60
cctcactgct tttagaaacct ctattcagat ttttcatat aatgattctt ttgcttttaa 120
cccaactcct cgag 134

<210> 1959
<211> 126
<212> DNA
<213> Homo sapiens

<400> 1959
gaattcggcc aaagaggcct ctttggccga attcggccaa agaggcctag tgaagtggac 60
caaaggctta gaattcaatc gacgggttag gccaaaccgt cgattgaatt ctagacctgc 120
ctcgag 126

<210> 1960
<211> 134
<212> DNA
<213> Homo sapiens

<400> 1960
gaattcggcc aaagaggcct agaccatata aaaattagaa agaaaaaagg agacactata 60
actgatccca cagaaatata aacttattag acactattat gaacttaaac attttctcca 120
agtttctccc tata 134

<210> 1961
<211> 309
<212> DNA
<213> Homo sapiens

<400> 1961
gaattcggcc aaagaggcct agtcttgatc cccacacatc tttccagcct cccctccac 60
tccactccct gctccctcct ccacctcccc atcctcttgt cccccctccc ctctgaatcc 120
agcccgagcg ggcttctcct gccctcatca catcacagaa gtacctctcg cttctgggtt 180
taattagagc ctcccccgat tacattttcc tctgaatttt ttccctatcta catttgatct 240
gtcatgttta aacccccctac ttctaaggga acttctctaa tctcttatcc tcatccccaa 300
atactcgag 309

<210> 1962
<211> 361
<212> DNA
<213> Homo sapiens

<400> 1962
gaattcggcc aaagaggcct agcatgaggg tctgtttaga gagcctcagt attaggaatc 60
agagggtggca gaggtagcct ttttaattgg ctgttataag catacaagat aatggtaagt 120
tttaagataa gtcttaaac tgagctcaaa agttagagaa cagaaatagg agaacaagaa 180
aaataaagt gccccttcag ttttaacctt taacagtagc agtgtttgtc agttttcttt 240
tggaagtgtt tatctacctg cagtgccttg taagaaaaat aacctgggag acagagttag 300
aatccgtctc caaaaaaaaa gaaaaaaaga aagaaaaaga accattccta cccctctcga 360
g 361

<210> 1963
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 1963
 gaattcggcc aaagagccta gtggagcttt tggagttttt catagtggc attcagcttc 60
 ttggatgtgt agatttatat cttttaccag atttggaaag gtttggccat tatttcttca 120
 aatagtcttt ctgccccctt ctctccttct ggaactccca taatgtgtat gttggtctgg 180
 ttgatgccac agtttccctta gtctctgttc actttttcat cctttttctt tctgttcttc 240
 acacttgata atttcatttg tcttatcttc aagttcactg gtttttttct ctctgcctgt 300
 tcagatctgc tgttgaagcc ttctagttaa attttaactt cagctattgt acttttcagt 360
 gctagaattt ctatttgggt ctatttttca tctctttcat gatatttttt ctttggttaag 420
 tcatcatctt cctggtctcg ag 442

<210> 1964
 <211> 122
 <212> DNA
 <213> Homo sapiens

<400> 1964
 gaattcggcc aaagaggcct agtctatgct tgaaattttc catgataaca agtttttttg 60
 gatttttttt gttttttaat tacaaaaaaa cctgttcacc ctatgtttct tcaacactcg 120
 ag 122

<210> 1965
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1965
 gaattcggca aagaggctac cgggacgccg tgaggcggaa gctgtgtatg gcgggaggct 60
 gtggcgggtcc ctrgggtggg aagctgtgtc tgttgctaga cgacgggaac tagctctcgt 120
 cacttccctca gcccgccgtc tgcccactcc tctagccgga acctgggggc ccggagccgg 180
 ggtaggcaca gagtgtctct cggaggtcca ggacagcggc cagcccgggc gcgggagtca 240
 gggccacgcc acctgcaggg aagaacccga gtcgaagcgg gaagatggct gcagacaagc 300
 ctgcagatca gggagcagga aacactcgag 330

<210> 1966
 <211> 122
 <212> DNA
 <213> Homo sapiens

<400> 1966
 gaattcgcgg ccgcgtcgac agaatgcttc tttctgacac actggtgttg ttaaattgct 60
 atcagatcct tcttttaaga tatttggcca tcaaaattca ctatgaatcc ccacagctcg 120
 ag 122

<210> 1967
 <211> 110
 <212> DNA
 <213> Homo sapiens

<400> 1967
 gaattcgcgg ccgcgtcgac ctctgttatt tggttggtgc tatacttgta ccgtaaaca 60
 gttttaaaac ggtgatgata ttaacaaaga aaatcccggt cattctcgag 110

<210> 1968
 <211> 259
 <212> DNA

<213> Homo sapiens

<400> 1968

```
gaattcgcgg ccgcgtcgac caaaataagc catgctgctt tgcacacaca ctagccttct 60
tttgtacttt tcttctggat gggcttggcc aaaacaggct caggccaaag acctcccaag 120
ctgtatgtac ttccagtatc ctgaaacagt gtttgggtgac ataatgccaa gggtaaaca 180
gcctgattta ggcactgctt tatccagggg cttcacccat gaaattaata aaacttatct 240
gagtcacttg aaactcgag                                     259
```

<210> 1969

<211> 218

<212> DNA

<213> Homo sapiens

<400> 1969

```
gaattcgcgg ccgcgtcgac gtgactctac tagaagagga ctcttagaag gtttcctccg 60
gacttttact catgtaccct ttccctttgc tgattttgct ttgtatcctt tccactgcaa 120
tacatttttag ccattagttc aatgaacata tgcagagtcc tggaagtcac ctctcggttag 180
ccaccaaaacc tggaggtggt cctgcggatc ctctcgag                                     218
```

<210> 1970

<211> 237

<212> DNA

<213> Homo sapiens

<400> 1970

```
gaattcgcgg ccgcgtcgac aatcaaggca attaggatat tcattctcaa cgtttatcat 60
ttctttgtgt tgggaacatt ccaaattctt tagctatttt gaaatataca ataaattatc 120
attaactatc atcaccctat gctgctatta aacactagaa cttattttatt ctctctgact 180
gtatttttgt acctattatc caccctctct tcatccccac cccctactca actcgag 237
```

<210> 1971

<211> 265

<212> DNA

<213> Homo sapiens

<400> 1971

```
gaattcgcgg ccgcgtcgac ggggagttgt ataggaactt acctagataa atttgtttat 60
tcctgtgtcc agaaaccaac ctttgatcat tcacacacag gactgctgtc tacttgggat 120
gttgacaatg tttattgccc acaaatgttg tttgctccaa gcctttgtca ttaaatttgt 180
gctaaataaa tgtgagggcc accagcttaa ggggactgct aactctcttc ggcccctagt 240
gctggcagtc ccctggccgc tcgag                                     265
```

<210> 1972

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1972

```
gaattcgcgg ccgcgtcgac atgggctaca acagtgcag tcccatgggt tccatgacct 60
ctttcatcag tgctcttcag agtacagact ggctctgtaa tggggagctt tcccatgact 120
gtgacggacc cataactgac ttgaattctg atcagtaacca gtacatgaat ggtaaaaaa 180
aacattctgt tcgaagattg gaccagaaat actggaagac tatactgagt tgtatatatg 240
tttttatagt atttgattt acatctttca ttatgggtat agtccatgag cgagtgcctg 300
acatgcagac caatccacca ctcgag                                     326
```

<210> 1973

<211> 188

<212> DNA

<213> Homo sapiens

<400> 1973

```

gaattcgcgg ccgcgtcgac cctgaaatga gattatcttt cattgtgttt tcttctcaag 60
caactattat ttgacctctg tctccagtta atggcaaaat cagtaaaggc ttggaggatt 120
taaaacgtgt tagtccagta ggagagacat atatccatga aggactaaag ctacgcaatg 180
aactcgag                                     188

```

<210> 1974

<211> 196

<212> DNA

<213> Homo sapiens

<400> 1974

```

gaattcgcgg ccgcgtcgac agtatcttta ggtagcttc ttaatgtttc aggggttttt 60
gtttcttttt cttttttttt tttttaactt aacaaaatca aatgctttca aacagggccc 120
gactcttaat tgtaatggag atgatggaag ggggagagct atttcacaga atcagccagc 180
accggcaciaa ctcgag                                     196

```

<210> 1975

<211> 252

<212> DNA

<213> Homo sapiens

<400> 1975

```

gaattcgcgg ccgcgtcgac cattcctcat ctacactctg aagctctgaa gtctttgacc 60
atgcaagttt taaatagcat ggcagcattt attgcccttc catcaatctt gcaaagaatc 120
ttacaggatc cagttttatg aaaaggaaaa cttggagaaa tccaggggact tatcttgga 180
atgttagata cctttaacta tgaacaaacc ctgctggaaa caacaaccag ccttctaaac 240
caagaactcg ag                                     252

```

<210> 1976

<211> 174

<212> DNA

<213> Homo sapiens

<400> 1976

```

gaattcgcgg ccgcgtcgac ggtttgacct gagctccctt cctcacaccc tgtatgcatg 60
ttctgtctct ggggtctctg ctggtgtgtt ccgctgtcgt ttgtcttgct gactccacag 120
agagtttgtg tcctggtgtc cacaaagagt gcacgtcaag gtcaggagct cgag 174

```

<210> 1977

<211> 191

<212> DNA

<213> Homo sapiens

<400> 1977

```

gaattcgcgg ccgcgtcgac atgctgttga gtgttattca tgagaatgca gggcactttc 60
tccttctcct tggagcagta ggaggcaaag tccttgagaga tgatgtctgc atactggagg 120
agcacattac tgatggtctt ggcaaagcgc ctcatgtagt gccccacgat ctgaggggtc 180
ggacactcga g                                     191

```

<210> 1978

<211> 196

<212> DNA

<213> Homo sapiens

<400> 1978

```

gaattcgcgg ccgcgtcgac gttgcaaaga aaagatctga gatttgcttg aaaactttcc 60
gtgaggatac acattacaag gtatccattt tcattttaat aactcttttt aaaaaattat 120
cttttctctg attaaaaatc ccttttccaa aatgcctagg cctctataaaa caagtcttta 180
tcattctgata ctcgag                                     196

```

<210> 1979

<211> 344

<212> DNA

<213> Homo sapiens

<400> 1979

```

gaattcgcgg ccgcgtcgac ttcttttttc catttttttc caatttgag tcaactgaaa 60
ctaagctgtg ctttcataaa gccctgcaaa ctgaatctag acaacttcag aagaaaaata 120
acagcaacct atttacatac ataagccact ttcataacct cctaccgatg tatggacttc 180
agagtaatgt ggcttatagc aattttccag gattgttctt ttgtttgttg ttgttctccc 240
ttctctcccc tattttgtct ttatgggaca tgacacttca caaccttcta aaaatgagtt 300
ttcctaataa ctcaggacct actcgtctag aaataaacct cgag 344

```

<210> 1980

<211> 616

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (32)

<220>

<221> unsure

<222> (46)

<400> 1980

```

gaattcgcgg ccgcgtcgac actgtttgaa gnatttaaca gtaagntaca gaagaagtac 60
cttcgagctg agacctgcag gtgtataaat atctaaaata catattgaat aggccctgac 120
atctgaatct ccttcagacc caggaaggat ggctatgact tggattgtct tctctctttg 180
gcccttgact gtgttcattg ggcatatagg tgggcacagt ttgttttctt gtgaacctat 240
taccttgagg atgtgccaag atttgcccta taatactacc ttcatgccta atcttctgaa 300
tcattatgac caacagacag cagctttggc aatggagcca ttccacccta tggatgaatct 360
ggattgttct cgggatttcc ggccctttct ttgtgcactc tacgctccta tttgtatgga 420
atatggacgt gtcacacttc cctgtcgtag gctgtgtcag cgggcttaca gtcagtggtc 480
gaagctcatg gagatgtttg gtgttccttg gcctgaagat atggaatgca gtaggttccc 540
agattgtgat gagccatata ctcgacttgt ggatctgaat ttagctggag aaccaactga 600
aggagcctat ctcgag 616

```

<210> 1981

<211> 240

<212> DNA

<213> Homo sapiens

<400> 1981

```

gaattcgcgg ccgcgtcgac aaagaattca aatatgcacc tggctccctt cactattttg 60
ccctatcctt tgtgtcatt cttactgaaa tctgtcttgt cagctcagga atgggattcc 120
cccaggaagg aaagcacttt tctgttcttg gaagcccaga ctgttcactt tggggcaggg 180
acgaacatgt gcctcgtgaa tttgcttgaa aacagtcacc atcttctacc ccctctcgag 240

```

<210> 1982

<211> 130

<212> DNA

<213> Homo sapiens

<400> 1982

```

gaattcgcgg ccgcgtcgac gttacaaaat gaagactgga atatgttttc ctttttcttt 60
tcttttcttg ttttttttga gatggagttt tgctctgtca cctaggttgg catggcggcg 120
tgatctcgag 130

```

<210> 1983
 <211> 145
 <212> DNA
 <213> Homo sapiens

<400> 1983
 gaattcgcgg ccgcgtcgac agaaaacact ccataattgc ttcccttgat ttgctgagg 60
 atttggtagt attttagtaa gcaaactgtt ttttggtttt tccttaatgt ttttaatttt 120
 ttttcctctt gcaacaactc tcgag 145

<210> 1984
 <211> 211
 <212> DNA
 <213> Homo sapiens

<400> 1984
 gataattttt ggctctttt ttccctcag agaaaatata aatctttcaa aatatattta 60
 actttctctt atttctttcc ctatttaact tttctctatt tctaataatca ccactccaat 120
 gaaatgtttt attatctttc atttaagatc tctcattctg attgatcttt cacctgcctt 180
 tggcctttca atacgaccca ccactcga g 211

<210> 1985
 <211> 220
 <212> DNA
 <213> Homo sapiens

<400> 1985
 gaattcgcgg ccgcgtcgac tgagccttag catgggaata acaatgatgt gtatggcatc 60
 taatacttat ggaagtaacc ctatttccgt gtatatcggg tacacaattt gggggtcagt 120
 aatgtttatt atttcaggat ccttggtcaat tgcagcagga attagaacta caaaaggcct 180
 ggtccgaggt agtctaggaa tgaatatcac cagactcgag 220

<210> 1986
 <211> 208
 <212> DNA
 <213> Homo sapiens

<400> 1986
 gaattcgcgg ccgcgtcgac ctcatcacag caatagtgtt ctaataagtg ggaaacaatc 60
 taattgttca gcattagagg agagtgaagt agttcagatt cattcatata attcagtttg 120
 tcatttatta ggggtattgt ttttaacaat tcaagaaaac atgtataata acagaagctg 180
 gtttggtttt ttaatacgaa cactcgag 208

<210> 1987
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 1987
 gaattcgcgg ccgcgtcgac tgagagtgat gattttcttta aaaaaaatca gttttttct 60
 ctcaaataat gttctttatt tcacgaaatc atcaatctta agcatgagca gggataaaca 120
 actcctagaa ggaactcaat tcattcttcc tggattttct ctgttggtta atcacaaaaa 180
 tgatagtccc cctctcgag 199

<210> 1988
 <211> 216
 <212> DNA
 <213> Homo sapiens

<400> 1988

```

gaattcgcg cgcgctcgac ggaagtacat tccagtcctt aattcctcca gctggttga 60
tagctctgtc agaataactg cagtctaatt tttcccttca tttttaagt gatttttttc 120
tactaaatga tttcttttat ctattttctt tttcttgagc ctgatttatt ccctagtttg 180
ggcctttatg taacttttagc tccagcaciaa ctcgag 216

```

<210> 1989

<211> 250

<212> DNA

<213> Homo sapiens

<400> 1989

```

gaattcgcg cgcgctcgac actccatgtt tgcagctaaa cttctgactc acatgatggc 60
agccagctta ggtacacaga ttctgtttct ggctctgca tacgcaagtc cccaactcgc 120
tgaggagagc tggtcagcta tggctgctgt cacacattac ctgtatcttt gccagtttag 180
ctggatgctc attcagtcct tgaatttcct gtacgtgctg gtgatgaatg atgagcacac 240
aatctcgcg 250

```

<210> 1990

<211> 265

<212> DNA

<213> Homo sapiens

<400> 1990

```

gaattcgcg cgcgctcgac aaatatttca taattaatgt agaatgttcc taaaatgtaa 60
tactaaatct atgaacaatc tatgtttatt tcttttgaaa agaaattgtt tgaatcacat 120
tgctgcttta tgttaccttt ttcatacttt tagctacttc atgtacacga gatcttcctt 180
gattgtcact acaattggga attggtaatc tgggtgcact ctgtaacact ttttctccta 240
agatttgcta cccttgaatc tcgag 265

```

<210> 1991

<211> 162

<212> DNA

<213> Homo sapiens

<400> 1991

```

gaattcgcg cgcgctcgac agttaattaa catacccatc accttacgta cttacctatg 60
atgagaacat ttaaaatcta ccctgttagc agttttcaag tgtactatgc attattgtta 120
attatactca caatgctgta caatagaact ccagaactcg ag 162

```

<210> 1992

<211> 171

<212> DNA

<213> Homo sapiens

<400> 1992

```

ggtgttctca tgtggcctca cccaggctct gtgtattatt tggttaattaa tttatggatc 60
ttaaaaactg cagtattccc ccattttgtg atgagagtgt ggggctggca ggggttggtt 120
ggagggagga gagaagacag aggagcactt aagggtgcaa gcaggctcga g 171

```

<210> 1993

<211> 245

<212> DNA

<213> Homo sapiens

<400> 1993

```

gaattcgcg cgcgctcgac tgagctcttt cctgcctctg agccttggca cacactgttc 60
cctctgcctg gaataacctc tccccctagc tttctcggtt gttccttctt gtctcagctc 120
aaatgtctct tgtagagatg gcctccctga tcatgtcccc taacatagca cccccctca 180
ccctatcata taactcatgt tgtttgggtt cattttggct ttgtctttat agcactaaac 240
tcgag 245

```


<210> 1994

<211> 190

<212> DNA

<213> Homo sapiens

<400> 1994

```

gaattcgcg cgcgctcgac aataaaagaa agcctataag aataacctata agggtaggca 60
catcaccact gagagaaaaa aaaaaatcaa gggagtttat gttaaagtga gccctattta 120
agagatagca gaagaattaa gattgagact taaaaacaaa ataattgtta tgaaaatccc 180
tttcttcgag                                     190

```

<210> 1995

<211> 190

<212> DNA

<213> Homo sapiens

<400> 1995

```

gaattcgcg cgcgctcgac gaaatatact ctaatacggc aaatcttaga tattattatc 60
ttccatctat tatttacaat ttttacaatt taccatctct ctcatatcat gagattctaa 120
gttttagacc atgttaatgt ttcttttttg ctggttcgtg ttttcaagat ttggcaaacc 180
aaatctcgag                                     190

```

<210> 1996

<211> 124

<212> DNA

<213> Homo sapiens

<400> 1996

```

gaattcgcg cgcgctcgac ctgcctcgta aaagtttttt catctccatt agtttgtaac 60
tttctgtaa taacttgact ttgggatggt ccatttcag gtgctgttc accagttact 120
cgag                                     124

```

<210> 1997

<211> 178

<212> DNA

<213> Homo sapiens

<400> 1997

```

gaattcgcg cgcgctcgac gagatcctgg attgagaatc tgtgttttag attctttatt 60
ttagtgatt tttctctaaa gcatttttta gttttatttt ctcttacaaa cttattttta 120
ttttttcttg aagctctgta tttctctcct catgaagatt tttgctgcat tactcgag 178

```

<210> 1998

<211> 247

<212> DNA

<213> Homo sapiens

<400> 1998

```

gaattcgcg cgcgctcgac ctgtgcttac ctttgggatg ggctcattat atatgtttgt 60
tcagaccatc ctttctacc aaatgcagcc caaaatccat ggcaaacaag tcttctggat 120
cagactggtt ttggttatct ggtgtggagt aagtgcactt agcatgctga cttgctcatc 180
agttttgcac agtggcaatt ttgggactga tttagaacag aaactccatt ggaacccggg 240
actcgag                                     247

```

<210> 1999

<211> 228

<212> DNA

<213> Homo sapiens

<400> 1999

```

gaattcgcg cgcgctcgac attgaattta gacctgcctc gagaacacac acaggcccca 60
caccctcctt cctggctcca ctcaccaag atattgcaac ctctcaata caccttgatg 120
actatctcag cctccacatc cttgcattgc tatttatgct gcctgggtgca cctcatgctg 180
cctcaccca tcactctgct catttctact cttactccag atctcgag 228

```

<210> 2000

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2000

```

gaattcgcg cgcgctcgac ggggtgggca ataggtcagt gaattccagg tagtaggcca 60
catccataat tgcggcatgc tccttagtaa gcagagtggg aaatgggtac aaatagaaca 120
cagaacagaa agaatcctaa ccaagagggt gaaggaaata agccaactaa taataatggt 180
tctttcttgg tattgggggt tattattaat attatgcttc tttgtaatat tcagtattgt 240
caagacagtc tcaagaactg aaggaaattc agatgaaata caactcgag 289

```

<210> 2001

<211> 191

<212> DNA

<213> Homo sapiens

<400> 2001

```

gaattcgcg cgcgctcgac tagacctgcc tctaaattgt ccaccatcaa cgaacccct 60
ccaaggtttg ctggaacac tgtagcctg taagtagcag atactccctc ctctgtttgg 120
tccagtaacc tgtaatgtca ctattctttt tacttcttgt tgcgctccc ctctcacc 180
aagctctcga g 191

```

<210> 2002

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2002

```

gaattcgcg cgcgctcgac gaaagaaagt tctaatgtca ttttcaagat cttcaggaaa 60
acgaactaat tttagttcaa ttgctgtgtt ggtgttacat ttgtactctg ccagtttctt 120
ctccactgcc ctcgag 136

```

<210> 2003

<211> 179

<212> DNA

<213> Homo sapiens

<400> 2003

```

gaattcgcg cgcgctcgac atgagatttg aggtcaagga aatattttta ttatttttta 60
cgatgagaga aattgtagta cacatgtata tttatgggaa tgactcagta gaaagaccaa 120
aaatttcata tgtgagagaa ggaccaattg atgaagcgat gttcttgctg gtgctcgag 179

```

<210> 2004

<211> 188

<212> DNA

<213> Homo sapiens

<400> 2004

```

gaattcgcg cgcgctcgac ctagaagcaa gctgagtttc tatttcacac atacagtatt 60
ctgctgcttc ataatatatg cacatatatc ttcatatttt ttgccaaac ctttatttct 120
tcagtcaact attatctaata gactttgaac accaacgtag tgaaatgatt ttaaagggaa 180
ctctcgag 188

```

<210> 2005

<211> 224
 <212> DNA
 <213> Homo sapiens

<400> 2005
 gaattcgcgg ccgcgctcgac cacactcaca cccagaacat gtttctatta tctggactat 60
 tcaggaactt agtgggaattg agtgctctga ctatgcacac ttggaatggt cctgttgag 120
 acagggcagg gttgaagaag ggtttggccc gtgcagtggg gtgcccacct tcagggcaag 180
 cagctgactc cttcctttcc cccaggcatg ggagctccct cgag 224

<210> 2006
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 2006
 gaattcgcgg ccgcgctcgac gtcacctttc tgaaatggga aaaattttac ataacgtatc 60
 atccccagta gggtttgag tgggtccctc aaatacactg ttatctttgt tgttggtttg 120
 ttttggtttg agacggagtc tcgctctgtc acccaggctg gaatgcagcg gcatgatctc 180
 ggctcaatgc aacctcgag 199

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
 gaattcgcgg ccgcgctcgac cctaaaaact tagtagccgt tttttttttt aaatacacac 60
 atagtgaata atatttttat ttaaaaaatta aaatgtttta ttttaagcaa ccaaaatttc 120
 tagtatatac actgcacaac ctcccaaatt tggatgtggc cactgtcatt tctgtttcca 180
 cactgatttt tgcacagtac ttactttttt tcacagcaac cactaacagc caagcttctc 240
 aaagatgtgg tggcattgaa aggaatgtag taaaacgata taatgttcaa acggaactac 300
 ctggacattt ttctccaaac ttagaaaacc tcgag 335

<210> 2008
 <211> 201
 <212> DNA
 <213> Homo sapiens

<400> 2008
 gaattcgcgg ccgcgctcgac ggcagtgaca agtgattgct aaagatacca tagtcttaaa 60
 gtttaagtcag taaacacaag atagtaatcc cagataaact ggaagctgta gagttaatac 120
 tcctttactg gtacagagca gtgtgtgtaa attgtagaaa atttagaaat acataaaaag 180
 atgaaaactc tactactcga g 201

<210> 2009
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 2009
 tgttttagatg tgtatgaaat acctgtatac gttagtgaat gctgtttact gtaacgggga 60
 aaaccagatt ctttgcactt gggccctcta ctgattgtta aaggagtccc tgtcacctgc 120
 tccccccacc ccgcgatgcy tctgtccact tggctaactt ttaatatgtg tatttttaca 180
 ttatgtatat tcttaactgg actgtctcgt ttagactgta tacatcatat ctgacattat 240
 tgtaactacc gtgtgatcag taagattcct gtaagaaata ctgcttttta agaaaaaaaa 300
 taacatgctg aggggtgacc tatatcccat gtgagtgggc actttattta taggatcttt 360
 aaaacatttt taatgaacta agtcactcga g 391

<210> 2010

<211> 207

<212> DNA

<213> Homo sapiens

<400> 2010

```

gaattcgcg cgcgctcgac cttttatggc agtcatatga accattatct tagcatggta 60
aacctgggtt ttgttcatat tttctccaga cagaaatgca aagatcaaac tgtgcaaata 120
ttaaaaaaat gcacatgctg ttttattcaa atgcctcttt tgtacatggt catgtttagt 180
gttttctcag aatcagcacc cctcgag                                     207

```

<210> 2011

<211> 191

<212> DNA

<213> Homo sapiens

<400> 2011

```

ggaatcatct tcgggcttat tcctgctagt tgttccatat ttctagattt catcttgaat 60
tttgaaaact gatttaagaa tatatttagt attattatta gtaaggggaat acgcaatcca 120
gtttcaattt tattcagaag taggtcacct aattctagaa aatgggttatt agtctagtgt 180
cgcttctcga g                                     191

```

<210> 2012

<211> 205

<212> DNA

<213> Homo sapiens

<400> 2012

```

gaattcgcg cgcgctcgac ccatgcccta tcagtgggaa taccctgatt tgctgagcat 60
tttgccctct ctcttgggac ttctctcctt tccccgcaac aacattagct acctgggtgt 120
ctccatgata agcatgggac tcttttccat cgctccactc atttatggca gcatggagat 180
gttccctgct gcacagcagc tcgag                                     205

```

<210> 2013

<211> 170

<212> DNA

<213> Homo sapiens

<400> 2013

```

gaattcgcg cgcgctcgac ctaaactata tgctaatttt aggtctattt ttattttaata 60
agtggataga accaaaccag ataactgact ctccctggaga agaagtaagt ggtctcttaa 120
taagcactgc ttggtctcag aaccttagta ctcccccaag ccaactcgag          170

```

<210> 2014

<211> 291

<212> DNA

<213> Homo sapiens

<400> 2014

```

gaattcgcg cgcgctcgac ctaaaggctc atcctcatat ccccaacccc tccacccac 60
ctccatccag aggaaaaggaa caaaatttct gcaacaagat tctaagcctc tccagggtag 120
gaaccagata ttattttact gttttttgct tttcaaacac caactcaaac cagatattgt 180
ttctctttaa tgtctatcac agtgtcttta gtgagttttc tatttgttga aggtgtattt 240
tgtgccaata acaagaatta ccgtgttaat tcttacaata caaccctcga g          291

```

<210> 2015

<211> 281

<212> DNA

<213> Homo sapiens

<400> 2015

```

gaattcgcg cgcgctcgac ccaacccgac acatgctact gctgctgcta ctgctgccac 60
ccctgctctg tgggagagtg ggggctaagg aacagaagga ttacctgctg acaatgcaga 120
agtcctgtgac ggtgcaggag ggccctgtgtg tctctgtgct ttgctccttc tcctaccccc 180
aaaatggctg gactgcctcc gatccagttc atggctactg gttcaggggc aggggaccat 240
gtaagccgga acattccagt ggccacaaac aacaactcga g 281

```

<210> 2016

<211> 237

<212> DNA

<213> Homo sapiens

<400> 2016

```

gaattcgcg cgcgctcgac aatgctaatt tgtagtttat ctgcttcaat tttgaagggt 60
aggatatata tagttatgtg tgtgtgtgtg tgtggggggg tagtggttgt gtgtgtgtgt 120
gtgtatatat atttatatat tactagtcca ttgctgtctac aacaaactac cactatgtca 180
gggcataaaa caaatttatt acactcctgt atgtcagagt atgatgcgga tctcgag 237

```

<210> 2017

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2017

```

gaattcgcg cgcgctcgac caccactgca acatatagac ctgagtgtcta ttgtattttg 60
gcttggtgtg tatgtctcttc attgtgtaaa attgctgttc ttttgacaat ttaagtgtat 120
gttttgttta ctgtaagttt gaaaataaaa atgaagaaaa aaattccaat gactgtgtctg 180
tggttgagga ctttatttac caagatgttt actcttcctt tcccttcca ttttgaggag 240
ctgtgtcact cctcctcccc ccaagtgtc gag 273

```

<210> 2018

<211> 202

<212> DNA

<213> Homo sapiens

<400> 2018

```

gaattcgcg cgcgctcgac ctaaaaactc attttcactg ctattaattt gctactttgt 60
gtcctcaata agggatttac aaatttaatt gattttgaac tcactgattt tgaacttaat 120
gaaattgttt atttcagtaa cttcactttc ttttatttcc ttcaccatta aacttggtga 180
tatgaatccc aaacatctcg ag 202

```

<210> 2019

<211> 278

<212> DNA

<213> Homo sapiens

<400> 2019

```

gaattcgcg cgcgctcgac tacacaacaa caacaacaac aacaacagaa aaaaaaacta 60
gcaacaaggc tgcaatatct acaattggga taatgagtcc tctgccctgg cttctgtctc 120
agcctccctt cccatctcta accatctgtt tgtctctcta tcttctgtc tttttctcag 180
catataaaca aacatgcaca ctaacaccca ggatggatat atctaagttt gctcatcaga 240
ccgaaagttt tccaatctgg catgtctccag aactcgag 278

```

<210> 2020

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2020

```

gaattcgcg cgcgctcgac tggtttttga attatcatac agtaaaattg acttttggct 60
tgggtgtagt ctgtgaattt aagcttagac ttctgtgacc actagaacaa tcaagccgga 120

```

gaacagttct gtctttcccc aaaatttgc catgctgctc ctccctgctg caactccttg 180
gctcgag 187

<210> 2021
<211> 303
<212> DNA
<213> Homo sapiens

<400> 2021
gaattcgcgg ccgcgtcgac aggagctgtt actaaagttc tgagggtgctg agttaaaca 60
ttccaatttc tcccttcctt ccatctttct ttattgattg attctcaaga ttttgacag 120
aaaactcttt gggggctaga acagcagtaa ttgcatcaca ctgttttcaa gacttcaagt 180
ttcaaaagca aatcattaaa aaaaatacag ttcttgattt gagttagata cagggacaaa 240
aaagtagcac atacttgaag gttacgtggt ctacaaatgg tggcaatatt tcccctactc 300
gag 303

<210> 2022
<211> 238
<212> DNA
<213> Homo sapiens

<400> 2022
gaattcgcgg ccgcgtcgac cttttgtca catagataat taaaagatgt gtattcatgg 60
atcaagactt aaaacattaa agatttttgc tgcttcacga gtgatattct caatgatact 120
ctacattatt ttactgtag ttgtagtgc agttgagaat gtgacaactt ctaatacagc 180
ttgggtgccag ctgccttcag ttttggaat gcacaaacag tattaccac cactcgag 238

<210> 2023
<211> 200
<212> DNA
<213> Homo sapiens

<400> 2023
gaattcgcgg ccgcgtcgac caaatatatt aaatttccca ctgctccaaa ttctttccaa 60
ctcttggtat catgagatta cttttctacc aattttatgg gtataaaatg gcacttattt 120
ttattttatt ttattttatt ttattttatt ttattttatt atttattttg agacgtagtc 180
tcactctgtc gccactcgag 200

<210> 2024
<211> 266
<212> DNA
<213> Homo sapiens

<400> 2024
gaattcgcgg ccgcgtcgac ataaataatt gcatattagg agaattggat tactgagggt 60
tgtattgcgt attgaatata ttttgtgtta ttttagaaga taataattag caggatattt 120
aattttatag ttaattcagc tgaatcatta agaagctcgc ctttttgtat ttttttatcc 180
tgtaacaga ctatctagaa aacatgcaa ttttaactat taacataatc ataataaaga 240
tatcttattt attgccagca ctcgag 266

<210> 2025
<211> 462
<212> DNA
<213> Homo sapiens

<400> 2025
gaattcgcgg ccgcgtcgac cgagtattta tgctttcttg gaataaatct tgagcaaaaa 60
gggcaagctg gtttttgact gcagagagaa ttagtggttc tgacagccaa gaagactaga 120
gctggatag tcagatgagt ttcttagaat cattctctct ccttctgtg ttgtgataga 180
ctatcactct catgaaggga aagactgttt ttgatgtcta aagtttaggc cagtgtctca 240

```

catatagaag ggctcaaatg ttcaatttaa taaataaggt ttttgtttag ttttttttcc 300
taattccgag aaaagacatt agactgatgg ttttaaggaa cgcaaagctc tctgaaatgt 360
agtaaggatc aacatcagtg tggagaacag tctggagggt catgactcga ggcagggtcta 420
gaattcaata ttgaattcta gacctgcctg agtgagctcg ag 462

```

```

<210> 2026
<211> 312
<212> DNA
<213> Homo sapiens

```

```

<400> 2026
gaattcgcgg ccgcgtcgac acgagctcgg atccgtgtgg agcacattat ccgggaagac 60
tacctcgtgg aggccatgga gatcctggag ctgtactgtg acctgctgct ggctcgggtt 120
ggccttatcc agtctatgaa ggaactagat tctgggtctg ctgaatctgt gtctacattg 180
atctgggctg ctctcagact ccagtcagaa gtggctgagt tgaaaatagt tgctgatcag 240
ctctgtgcca agtatagcaa ggaatatggc aagctatgta ggaccaacca gattggaact 300
gtagaactcg ag 312

```

```

<210> 2027
<211> 231
<212> DNA
<213> Homo sapiens

```

```

<400> 2027
gaattcgcgg ccgcgtcgac aatatttctt attattttat aatatctata ttactaaagt 60
gttttcattt catttccata ggtcataggt tttggatctg ttaaaattgc agcattcata 120
gctatggtag gaattctgtc tattgtggct cagggtagta tcattttatc tatacttaaa 180
aaatttaaaa aatatcctga taaccatagt ttcacaggaa cccatctcga g 231

```

```

<210> 2028
<211> 191
<212> DNA
<213> Homo sapiens

```

```

<400> 2028
gaattcgcgg ccgcgtcgac atgcaggtga ggatggagca acaggaaacgc tcgttcattg 60
ctgggtggcaa cgcaaaatgg cacagccact gtagaagagt ttggcagttt cttacaaaat 120
taaacatact cttatcatgc attctagcaa tcatgtcctc aggtatttat gcaaatgaat 180
tgtcactcga g 191

```

```

<210> 2029
<211> 669
<212> DNA
<213> Homo sapiens

```

```

<400> 2029
gaattcgcgg ccgcgtcgac gagaatgaat atgactcaag cccgggttct ggtggctgca 60
gtgggtgggt tgggtgctgt cctgctctac gcctccatcc acaagattga ggagggccat 120
ctggctgtgt actacagggg aggagcttta ctaactagcc ccagtggacc aggctatcat 180
atcatgttgc ctttcattac tacgttcaga tctgtgcaga caaactaca aactgatgaa 240
gttaaaaatg tgccttgtgg aacaagtggg ggggtcatga tctatattga ccgaatagaa 300
gtggttaata tgttggtctc ttatgcagtg tttgatatcg tgaggaaacta tactgcagat 360
tatgacaaga ccttaatctt caataaaatc caccatgagc tgaaccagtt ctgcagtgcc 420
cacacacttc aggaagttaa cattgaattg tttgatcaaa tagatgaaaa cctgaagcaa 480
gctctgcaga aagacttaaa cctcatggcc ccagggtctca ctatacaggc tgtgcgtgtt 540
acaaaaccca aaatcccaga agccataaga agaaattttg agttaatgga ggctgagaag 600
acaaaactcc ttatagctgc acagaaacaa aagggttgtg aaaaagaagc tgagacagag 660
agcctcgag 669

```

```

<210> 2030

```

<211> 238
 <212> DNA
 <213> Homo sapiens

<400> 2030
 gaattcgcgg ccgcgctcgac attgcacaat ctacgcaaac cactgaagtt tcatcattcg 60
 tttctactga cttccagata atcggagtca accttctaac cttctagtct cacttcttcc 120
 aaataaact gtacagactg gggagaatta ttctaccac tccctcattt catgcttgtc 180
 tgccttcttc tcgaaggctc gtatgatgaa aattgcaaaa acccagctaa tactcgag 238

<210> 2031
 <211> 151
 <212> DNA
 <213> Homo sapiens

<400> 2031
 gaattcgcgg ccgcgctcgac cttgaacact tattgcactt ttattttattg ttaactgtga 60
 aaagtacgtc ctttattggg ttccctttta tattcttggt ttgttaagaa gaatgggttg 120
 tttttatagc aaaactgtta agctgctcga g 151

<210> 2032
 <211> 242
 <212> DNA
 <213> Homo sapiens

<400> 2032
 gaattcgcgg ccgcgctcgac atatttcta ataggatatt cctattccct gataagcaga 60
 ttattataaaa acttcaatct acctaacagg tcattttgat aaggctatat tattaacgtg 120
 caatattcat attcatgtct tttttctttt tctttttctt ttttctgaga ttgagttttg 180
 ctctgttgcc caggctggag tgcaatggca cgatctcggc tccttgcaac ttccacctcg 240
 ag 242

<210> 2033
 <211> 240
 <212> DNA
 <213> Homo sapiens

<400> 2033
 gaattcgcgg ccgcgctcgac ctacacctgc cttgatacct gtgaaccatt ggaggacttg 60
 catctcctat tttggaagga atcatccag actaaaaggc tctaccact gatcctgaag 120
 aaaaaccctt tctccttaa aaaagataag tgaaaaccta cataatcttt aacacctctc 180
 cttgccccct taatggaatc cttttactat ttcattcatgt tattaagcag catactcgag 240

<210> 2034
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 2034
 gggagttaag ggaatgaagt tctgtgtgta ggctttgagg aaaccactgt gcaacttgag 60
 atgtctgtgg ttgtggggat gtccatccc tccgttcagt tgtgaagacc tctgctctgc 120
 cctcagctgc aaccagagcc tcgtcactct ggacctgggt cagaatccct tggggtctag 180
 tggagtgaag atgctgtttg aaaccttgac atgttccagt ggcacccgcc aaactctga 240
 g 241

<210> 2035
 <211> 138
 <212> DNA
 <213> Homo sapiens


```

<400> 2035
gaattcgcg cgcgctcgac ctttgcattg aatctattta ctgggttaca ttctatgtgt 60
agtttgcttt cttcattttt tttcttttta aaatgctcat gtcttattec aagcaccttc 120
ctccaaagcc ccctcgag                                     138

<210> 2036
<211> 206
<212> DNA
<213> Homo sapiens

<400> 2036
gaattcgcg cgcgctcgac ctgaattagt aaatattagt tccttctcct tatagccata 60
tgagtttgag aaatttttgt tccgaactgt gtaaaccaga aaaagattag atgttaatac 120
ttggaagatt tttaaaatct ttttgttttg gtctgttttt gtttataaca gctgtaatga 180
gatataattc acataccagt ctcgag                                     206

<210> 2037
<211> 150
<212> DNA
<213> Homo sapiens

<400> 2037
gaattcgcg cgcgctcgac ctgcctcgag tgtgccgctt ggtcatatgc agagaattgt 60
taccaggggc cgaacatgaa catagtctcc ccagatctta ttttgttttt attgttatgc 120
tcccaggctt tagcaaagga aattctcgag                                     150

<210> 2038
<211> 197
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (146)

<400> 2038
gaattcgcg cgcgctcgac attgattcta gacctgcctc gagtgggaat tcagagctta 60
acgtgtactg cttgtgtgtg tgcgtgagtg tgtgtgtgtg tatgagagag tgtgtgttcc 120
gcctcccacc ctctcccacat ctgctntggg tatttttggt tttgtttagt tttaggttta 180
caacagagag actcgag                                     197

<210> 2039
<211> 224
<212> DNA
<213> Homo sapiens

<400> 2039
gaattcgcg cgcgctcgac gcaatttagt gataaatgat tatacatttc aacttaacaa 60
cagataacaa aaattctcta gttatttatg gacttcgtca tctaaaaatt tggcttgctt 120
gtgtggactt cttattttaa agtgacacag ctaatcgata tacaagcaca tcattaaaca 180
tgcagaccaa gccaacacaa tttttccatg agtcacgct cgag                                     224

<210> 2040
<211> 294
<212> DNA
<213> Homo sapiens

<400> 2040
gaattcgcg cgcgctcgac atctgttatg gcctttctca ttcttctttt ctctgtctca 60
ggttttctac tgctctctct ctcagtctcc cgatcccttt ggccaacaca atcacaggag 120

```

ggctttgaag taagatgcct gcatccccga ggagcgcatt ttccagaggc tgggtgcaggg 180
 caggcaagaa cacacgggtgt cataggacag ccccgggcac ctccccaacg cgggctcagg 240
 agaaacgaaa gacggaggag aacttccagg tctatgagga cccacgact cgag 294

<210> 2041
 <211> 236
 <212> DNA
 <213> Homo sapiens

<400> 2041
 gaattcgcgg ccgcgtcgac cttataaaca aggagagttt ttgtgtgtgc gagatctcta 60
 agccagcgtg ggagggagcg cctcaggata agttattata ttcatctcgt tggtttctct 120
 cctgcccaat tcttggcaca gccattatgt ttgaagaaac caggataagg tacactgctt 180
 ttgtctgttt aattttttta gttgtttccc ttcactttca gtcttcaca ctcgag 236

<210> 2042
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 2042
 gaattcgcgg ccgcgtcgac gattacaggc atgagccacc atgcccagcc agttttcatc 60
 ttttttaaga ggaaaacaat aactaaattt tcttttacgt taaacattct tctatttctg 120
 ttatccattt gtaattcaaa aaatagtgtg tgttttgttc acgacagaac atcagatacc 180
 aaaccctctg ag 192

<210> 2043
 <211> 207
 <212> DNA
 <213> Homo sapiens

<400> 2043
 gaattcgcgg ccgcgtcgac gattgtcttt tcaattttgg agagttttcc tgtggctaca 60
 aggcaagtaa cgggttgga aaagtctgac tgtaagcgtt ggacaccttc atagtgtagt 120
 gtttttagtg ctttttttat acggttcttg taaattagat acgtgtagtg gtgtttcaga 180
 atgtttgttt atgcactagt tctcgag 207

<210> 2044
 <211> 105
 <212> DNA
 <213> Homo sapiens

<400> 2044
 gaattcgcgg ccgcgtcgac ctgtactgct agtaagtgac tgataacatt ataaactagt 60
 tatatttttc ttatgcgtca tcagctgctg gtggtgactc tcgag 105

<210> 2045
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 2045
 gaattcgcgg ccgcgtcgac cccataggga atccgtttta ctagcttata ctttcagtct 60
 ttctttttcc cctaaataag caaaaacgtg tcttcatttt tccctttcct gttttattta 120
 cacagaaggc atcttagtca gttgtctgac catcgctcct ctagtgggct gcgtgggtct 180
 ctgttgga gatgtaggga gcttatccaa ccagtacct ctggataggc aggcgcata 240
 ttacagggcc gttctcgag 259

<210> 2046
 <211> 250

<212> DNA

<213> Homo sapiens

<400> 2046

```

gaattcgcgg ccgcgtcgac ggagcaggcc aacgatgacg cgcgcacctt ctacatcatc 60
gagcgcgagc cgctcatcaa cacctacatc tccgtgccca aggagaacag cagctcaac 120
tgcgccagct tcacggcggg catcgtggag gcggtgctca cacacagcgg ctccctgcc 180
aaggtcacgg cgcaactggca caagggcacc acgctcatga tcaagtcca ggaggcagtc 240
atcgctcgag                                     250

```

<210> 2047

<211> 152

<212> DNA

<213> Homo sapiens

<400> 2047

```

gaattcgcgg ccgcgtcgac atgccccacc tgctctccag cctcaccta actccctcc 60
ccttcacact ttctgttcc ctgaagatgc cactgctggc tgtatcattg tacatgctgt 120
tcttcttacc tggaaataccc ttctccctcg ag                                     152

```

<210> 2048

<211> 255

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (108)

<400> 2048

```

gaattcgcgg ccgcgtcgac cacaaaattg ttcttcttg gagtgcttg gctattctta 60
gccaaactgtt cctccatatt acttctagaa ttagaccaac aatttatnaa tcaaacaac 120
ccaagagcat tgaaattttg attggatttg tattgaattt atagattaat ctggtaaacc 180
atgtcatctt tacaatgttg tcttccaata catgaatatg gtacagctct tcatttactt 240
aggcctttac tcgag                                     255

```

<210> 2049

<211> 121

<212> DNA

<213> Homo sapiens

<400> 2049

```

gaattcgcgg ccgcgtcgac cgattgaatt ctagatctgc ctccagggat aaaccccatc 60
tttcaagctt gcttcttgct tgatgcttcc tgctgcttcc ttgcttttgt ttcagctcga 120
g                                     121

```

<210> 2050

<211> 258

<212> DNA

<213> Homo sapiens

<400> 2050

```

gaattcgcgg ccgcgtcgac gaaaggaag aattgtttta gaaagacaat atttaaaaca 60
ccgcactgcc aatatattga tcctttatag ttatttccta aaatgctgtt ttcgaaacat 120
tcctttttca ccctgttggtg tggcttagac ccattctcgt atctgttaat tggaaagagg 180
ctacagacac cagcagtgtg cgttctgcag gtacacgctg ccaaagtaat tcctgctcat 240
ccatgccctt gtctcgag                                     258

```

<210> 2051

<211> 171

<212> DNA

<213> Homo sapiens

<400> 2051

```

gaattcgcg cgcgctcgac tgaagataaa ataaggttac tttcaatggt tagcagagtc 60
gtattcagaa tgaggggaact attaccatta ctagcaatga gccattcttc cctgagcccc 120
agacatgaac tgcaggaagg gaggggagcc ttgagtcgtg tggagctcga g 171

```

<210> 2052

<211> 130

<212> DNA

<213> Homo sapiens

<400> 2052

```

gaattcgcg cgcgctcgac gggggaggta tagacaagca aggatactta attaattaat 60
atattaacga agtatagaaa agcaagtata cttaatatat taagaaatga tggctaacat 120
ggcgcctcgag 130

```

<210> 2053

<211> 292

<212> DNA

<213> Homo sapiens

<400> 2053

```

gaattcgcg cgcgctcgac tgcctgagga tatgggggtg ggggtagggg gtgtggagag 60
aagggttatg ccttctggag gagtggggag aaaagggaat gattagggaa aaggaaacaa 120
agtaaaatat caagaagcat ctttcaaaag cagttctata gctaattcct tttaaagggg 180
aaaggaaagg taaccaaagc aggaaaacgt ttatctctgt gtcttaaaaa aaaattgtct 240
accatacata tatcaaaaa tgtgggaaaa atacttattc cagggtgctcg ag 292

```

<210> 2054

<211> 249

<212> DNA

<213> Homo sapiens

<400> 2054

```

gaattcgcg cgcgctcgac caacaagttt agatattaat agccactcaa agccttcagc 60
ccatataaca tgaagtgaca actgagctct gcacataatg ctcaagctct ataataacca 120
acactctcag cacaagggtg gacaagaaaa gaaaaatctc ctgctggcca ggaagaccac 180
aaggaggctt tctgacttgg cctgtgcttt tgatttttaa aacatttttt aaaaggagcc 240
ccactcgag 249

```

<210> 2055

<211> 227

<212> DNA

<213> Homo sapiens

<400> 2055

```

gaattcgcg cgcgctcgac gccaatacce cttctgtgaa tacaggttat ttcaagcttt 60
cgtcagtggc aaccactctt aggcagcagc aactggtttt ggaaatttcc ctgatgtcag 120
taccacctgg atgtggacct ttgctacctg tattaatacc agtggcctca ttttgctgta 180
tcattacaat ttggcttctt atattaatgt ttgaaaagga tctcgag 227

```

<210> 2056

<211> 639

<212> DNA

<213> Homo sapiens

<400> 2056

```

gaattcgcg cgcgctcgac atgaatcttg gaaacatgtc tgtgaaggaa ggcagccaca 60

```

```

gaagacacat attgtatgat tctgtttacg tgaaatgtct agaataggca aatccataga 120
gacaaaaaatt agaattagtg gattactgat tgcctagggc tagaggagtt gggagaataa 180
agaaggaagg aatactaact cactggaatt tctttttgag gttataaaaa tattttcaaa 240
ttggatggcg gtaatggtta atttccacca ttataatact aaaaccattg agttatacac 300
tttaaatgag caaattgtat ggtgtgtgaa ttatagggta ataaagctgc ttaagtacat 360
atatatgtat agcaataatc atttattgga tttcagttca acagacactc ctatgagaag 420
ccctttgaga tacgccagac aagagagatg agggctctgcc cttgaaatct gaaaactgat 480
agatcagaaa tctggtagac agtaggtgat tataatgaga tgttctgtaa ctgagatgga 540
gaaaaagatg gtgtacaaat gcaaaggaga gaggtgggct agcgctggct gggactggga 600
ggcagcagga agaaggtggg atctgtgccg gccctcgag 639

```

<210> 2057

<211> 206

<212> DNA

<213> Homo sapiens

<400> 2057

```

gaattcgcg cgcgctcgac agacagaagt gtagtatgct gtatgaatat tttatattaa 60
aatatgaagg tttgagagca ggccattggc tactgactgt atttcccttg ctgagtacat 120
ttttgttttc cttttaccat tttatcttgc tttggaggac cttaaagtct actgaaactt 180
acctgagaac cacaggacat ctcgag 206

```

<210> 2058

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2058

```

gaattcgcg cgcgctcgac atttgaagca ctctaaagct ccaaaagact ttagacctag 60
ttcatcttca gattatttcc atcttaacgt ttccacctct ttggcccca aatgggcacc 120
ttttgttgcc atttaggaaa gggagaagtt tggggttttt tgggttggtt tttgtttttt 180
ttgagacagg gtctcactat gtcacccagg ccaggctgga gtacagtggg ccattatggc 240
tcactgcagc ctcaaaactcc tgaactcaag cgatcctccc acctcagcct cccaggtagc 300
cgggactaca ggctcgtgcc accagggtatg gctagttgta tttttttag agacgaaatc 360
ccactctgtg caccggctgg tctcgag 387

```

<210> 2059

<211> 253

<212> DNA

<213> Homo sapiens

<400> 2059

```

gaattcgcg cgcgctcgac gttacatgta aatagcagaa taagccatgt tatttacta 60
ttccatcctt ttgcactctt cctctctata tattatatac gtatatgtat gtgtgtatgt 120
acatacacac acacatatatt ttttctctca tgagatgtcc atctcttctt tctctgcaag 180
gctattacct actcctcaaa cctcagaaaa gaagctcaag ggacatctcc cttgggacca 240
tctcaactc gag 253

```

<210> 2060

<211> 200

<212> DNA

<213> Homo sapiens

<400> 2060

```

gaattcgcg cgcgctcgac cttgtcttca ggcaggcatt tctgggatct aaactagaaa 60
tccttgaaaa caaatagtag cagccacttt gaggaatgtg cattcactat agtgggttat 120
tatggggtct ctgcctcctg gctgtgttat gcggagccca ggagtggagg agagccgtgg 180
aaatagatag ggttctcgag 200

```

<210> 2061

<211> 427

<212> DNA

<213> Homo sapiens

<400> 2061

```

gaattcggcc aaagaggcct acaggtgttt tcatttggtg atcagggctg aacagagaga 60
tctcaccatg gactttgggc tgacctggct ttttcttggt gctattttta aaggtgtcca 120
gtgtgcggtg cagctcttgg agtctggggg aggcttggtg cagcctgggg gatccctgac 180
actctcttgt gaaggctcag gcttcaactt cagcgataaa gccatgagtt gggtcgggca 240
ggctccaggg aaggggctgc agtgggtctc cactattagt cccagtggtg agaccacaaa 300
ctacacggag tccgtgaagg gccgcttcac catctccaga gactcgtcca ataacaccgt 360
ctatttacia atgaagagcc tgagagtcga ggacacggcc ctatattact gttcgaagga 420
tctcgag                                     427

```

<210> 2062

<211> 156

<212> DNA

<213> Homo sapiens

<400> 2062

```

gaattcggcc aaagaggcct aattctagca acgttgattt accttacatt cctgctgaaa 60
actcaccaac tcgccagcaa ttccattcca agccagtaga ttctgacagc gatgatgac 120
ccttgagggc attcatggct gaagtggagt ctcgag                                     156

```

<210> 2063

<211> 110

<212> DNA

<213> Homo sapiens

<400> 2063

```

gaattcgcgg ccgcgtcgac gaagaagtta ttctgattca catttaagga ttgacattac 60
ttcaagcaaa attgggaaaag aatatgaaac aaaagatatg tggcctcgag                                     110

```

<210> 2064

<211> 416

<212> DNA

<213> Homo sapiens

<400> 2064

```

gccctgggat tttcaggtgt tttcatttgg tgatcaggac tgaacagaga gaactcacca 60
tggagtttgg gctgagctgg ctttttcttg tggctatttt aaaaggtgtc cagtgtgaag 120
ttcagctgtt ggagctctgg ggaggcttgg tacagcctgg agggctccctg agactctcct 180
gtgcagcttc tggattcagt tttagcagct atgtcatgag ttgggtccgc caggctccag 240
ggaaggggct ggagtggtgc tcagctatta gtggtagtgg tgggtggcaca tactacgcag 300
actccctgaa gggccggttc accatctcca gagacaattc caagaacacc ctgcacctgc 360
aaatggacag cctgagagcc gaggacacgg ccgtttatta ctgttgcgaa ctcgag 416

```

<210> 2065

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2065

```

gaattcggcc aaagaggcct agcttgggct gatggagagg gcctacaggg ccaggccttg 60
aagggggagg aaattgttag ctacacgacc aagagacaga agagaggaag gagtttgtac 120
ccacaactca gctttatttt atgtaagctc tttctgcaaa gggaaagtag ctctttgtac 180
caaagcaagg gcctctgaat gagagctggg agaggccaga atgggcctgt aagaggttga 240
tgtgtatgag acctgaagcc ctatgccttt gggaaggaga ggaaggacta atatttgtgt 300
ggtacaaagg atgtgccttg catacccat atcttttaca aagacataaa tgtcttctga 360
ataaaagtat gatgatgatg atcatggtga tgaagatgag ggtgatgatg ttgatgatga 420

```

tgatggtgat ggtgatgat gtagtatgat aatgctgatg gtggtgatgg tgataggagg 480
 gtgatggtga tgatgatggt gataagatcg ctgcgag 516

<210> 2066
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 2066
 gaattcgcgg ccgcgctcgac cgcggccgcg tcgactatct atctcttgga tgtttattgt 60
 gaggttactc agacttaggc atagaatttg cattgttgct aaagataatt aatgctttac 120
 catcctgtta tttttgtgtt tacagctaga ttgttaataa tttctttaat gtcttaaaaca 180
 agcttgaaca aatccttaga taggaaaagt attcactttt tccaaaaggaa atattaacat 240
 gctaattact gatataattac ccgtaggttt tcttaatatc tcaaatgtaa actgtgaata 300
 attttttctc caaaggataa atctaccaag aaactctgat atatgcaaat acttatgcat 360
 attaaacttt ctgatatgac atctagagct ttgtgtaca tttctacaa atagaaacac 420
 tcagaagacc tttggttgtt aaaagatgca tcctggccag gcaatactcg ag 472

<210> 2067
 <211> 254
 <212> DNA
 <213> Homo sapiens

<400> 2067
 gaattcgcgg ccgcgctcgac cgtcgattga attctagacc tgcactctaa atgaaatact 60
 cttttttctc ttcagcattg acttggtcgc cttcagcatt gataatggct gtatcagcat 120
 ctgggtgcac ttcagctcct ttagcttcac ttgttaataa cgttccttta tgccttgcca 180
 gatatcgacc aagcagaaag atagaacaca gcgtgacaaa tacaactaca gccactattc 240
 ctccaaacct cgag 254

<210> 2068
 <211> 169
 <212> DNA
 <213> Homo sapiens

<400> 2068
 gaattcgcgg ccgcgctcgac aaaaaagcat aatgaaaaag aaagctgggc acaaagctaa 60
 ctccaaacac aaagacaaag aacagacagt agtagatgct actgagcagt taggcgattg 120
 caaattagat agtcaggaga aagatgctac atgtgaactt ccgctcgag 169

<210> 2069
 <211> 242
 <212> DNA
 <213> Homo sapiens

<400> 2069
 gaattcgcgg ccgcgctcgac agttcagtgg ccatagatat tttactcagt gtcactgtag 60
 cacctgtttc ttttaatctg ctcttccacc gtgagttgtt ctgactgcac ctccactctg 120
 ggaaacaaag gcttagctgt acattcatgg ctgagagcat caaaacctgt gttttcatta 180
 ttgctggcgag cttctgttgt ttcaacatgc caaggtttaa catcctttcc aaaatcctcg 240
 ag 242

<210> 2070
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 2070
 gaattcggcc aaagaggcct actcgacttt ctctgcacag caggteccagc atcctttgaa 60
 acatgagttc ttaccagcag aagcagacct ttacccacc acctcagctt caacagcagc 120

```

agggtgaaaca acccagccag cctccacctc aggaaatatt tgttcccaca accaaggagc 180
catgccactc aaagggttcca caacctggaa acacaaagat tccagagcca ggctgtacca 240
agggtccctga gccaggtctgt accaagggtc ctgagccagg ttgtaccaag gtccctgagc 300
caggatgtac caagggtccct gagccagggt gtaccaagggt ccctgagcca ggctacacca 360
agggtccctga gccaggcagc atcgag                                     386

```

<210> 2071

<211> 144

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (55)

<220>

<221> unsure

<222> (63)

<400> 2071

```

gaattcggcc aaagaggcct agagagtggg ggataaccaa ttgtcaaac ataanttttc 60
ccnatattga aataatagtg ccattatata ctaaaatctc atatgcaaag aaatctattt 120
caaaaattct ggggactcct cgag                                     144

```

<210> 2072

<211> 624

<212> DNA

<213> Homo sapiens

<400> 2072

```

gaattcggcc aaagaggcct aagcgtaggc aacaaagcaa gactccgtct caaaaaataa 60
ataaataaat aaataaaaaat aataacaata atgaagaaaa caatccggtg attattgtca 120
gcaataaaat ttcttcaatc aaccatgctt tagtcctggc agttctctat cagtgaagttt 180
caatcaaaaa gtttgtttat aatttttttt ttttttaaat ttgaaattt ggaacaaca 240
tcataaatga tggttagttt tctgcagctc cctatttttg cagatagtct gttgttactc 300
ataattaatt tgaactaaaa agtagtggtg tacgatatca tgggctgtga atgtgtttgt 360
gacttgatct gagaaccac acaccactta ggatgcttct gtaggaaaat tagagtatgg 420
aactcaacttg cccacgcttt cctgtctca gtccatggtg gtaggctgca aagtctgggg 480
ctagaaggac actgaacaag acttcagcag tacatgtagg tcttccagag ggaaggaata 540
taatagttga gagaataatt cctttcctct gtgacttttag gcaaattctt ggctatgctg 600
ttattttattt gggccaccct cgag                                     624

```

<210> 2073

<211> 260

<212> DNA

<213> Homo sapiens

<400> 2073

```

gaattcgcgg cgcgctcgac gtttgatcga agtctcattt ttgactagaa acagtaaaga 60
gcagctttat taagatcaat ggaatgggtc tgaatgcctg tttctacaga aggattaaat 120
taaaattttt tctttttttt ctttttttga gacagtcttg ctctatcacc caggctggag 180
tgcagtggca cgatctcggc ttactgcaat ctccacctcc cgagtccaag caattctcct 240
gcctcaacca tccactcgag                                     260

```

<210> 2074

<211> 142

<212> DNA

<213> Homo sapiens

<400> 2074

gaattcgcgg ccgcgtcgac ctgaaaatag aatgagcttg gttaagcacc tctcctttgc 60
 ccttcaccct gactcctgtc actgtctcca tccccaaata aagctgaaat atttttttaa 120
 gtttagctgcc gagaccctcg ag 142

<210> 2075
 <211> 159
 <212> DNA
 <213> Homo sapiens

<400> 2075
 gaattcggcc ttcattggcct agtattatct actcattgga ctattaggaa caccaagttt 60
 ataatacatt gtctaacacg ctgtatgtat cacttaataa gtgttttctt cctcttcccc 120
 atccagagca cttttctacc tcttccccca cactcogag 159

<210> 2076
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2076
 gaattcggcc aaagaggcct agttgggagg agagtaaata ccctgattcc tgctcatagg 60
 aagctggacc aacccaaagg gcctgatata ccatgaagcc catttttctt tgtagacct 120
 gtcagaatta cagcaggcct tgggtcatat actaagacaa gggtagaacc agatactgga 180
 agctgagggg agggccctaag aaatagaagg gcagaattgg aagagatggg aaccaccca 240
 tctctgagca taagcccat ctatgcattg tctttggcca ttttaagtct gttagcttct 300
 tttaaagggt agtgagtata gggctcgacg aggtctagaa ttcaatcggg tctccctata 360

<210> 2077
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 2077
 gaattcggcc ttcattggtat ttttagtaga gatgggggtt caccatgttg gccagcctag 60
 tctcgaaact ctgtcctcaa gcgatgcacc tgcctcggcc tcccaaactg ctgggattac 120
 aggcgtgagc cactgctctc ggctgtgag ttttttctt gcgggaatgc tctcacttg 180
 ttgcatttct tgcgggtgtt tgcatccga gccctttgcc gcttgagca tccaattatc 240
 tctccagtc agcagccact tgccttcag tgtttctgga gtcgag 286

<210> 2078
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 2078
 gaattcggcc ttcattggcct aatgctggct aataggctact taagttcatt atgctttgta 60
 ttctctactt ttgtatatgt ttgaaggctt ttacaataaa agtttttaa agtaaatgca 120
 gatgctcaca cacacataaa attcaacta agttacaaa gaaaaaatta aaaccacacg 180
 taatactacc agactgaatt cttctttcac agtatttcca gcaaactctg aatcagaaga 240
 gttgtattca aattctgggt ttgtcaataa tgagctctgt gaacttgtag ataacttctc 300
 tggattgatt ctgacctgc ctcgag 326

<210> 2079
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 2079
 gaattcggcc ttcattggcct aaaaaaata aaaaacatat atatatatag ataggatat 60
 agatatatct atagatatat atgagtggtt tataaatata tctatagcta tgtatatgag 120

```

tgattttttt taaagttgca gcaccatttg ttgaaaacct atcctttctc cactgaattg 180
cctttgcacc ttattgaaaa ttagccatac atgtgtgtct cattctggat tctattctgt 240
ttcattgata tgtttgtcta ctctgatgcc cataccacac tcgag 285

```

<210> 2080

<211> 292

<212> DNA

<213> Homo sapiens

<400> 2080

```

gaattcggcc ttcattggatt taatattact tacagttttg atatgtgtcc aaataactgc 60
tcaggccgag gagagtgtaa gatcagtaat agcagcgata ctgttgaatg tgaatgttct 120
gaaaactgga aaggtgaagc atgtgacatt cctcactgta cagacaactg tggttttcct 180
catcgaggca tctgcaattc aagtgatgtc agaggatgct cctgcttctc agactggcag 240
ggtcctggat gttcagttcc tgtaccagct aaccagtcac tttggactcg ag 292

```

<210> 2081

<211> 574

<212> DNA

<213> Homo sapiens

<400> 2081

```

gaattcggcc aaagaggcct acatggccga agcaagtagc gccaatctag gcagcggctg 60
tgaggaaaaa aggcattgag ggtcgtcttc ggaatctgtg ccacccggca ctaccatttc 120
gaggggtgaag ctctctgaca ccatgggtga cacttttctt cagaagctgg tcgccgccgg 180
cagctaccag agattcactg actgctataa gtgcttctac cagttgcagc ctgcgatgac 240
acagcaaatc tatgacaagt ttatagctca gttgcagaca tctatccggg aggaaatctc 300
tgacatcaaa gagggaggga acctagaagc tgtcttgaat gccttgata aaattgtgga 360
agaaggcaaa gtccgcaaaag agccagcctg gcgccccagc gggatcccag agaaggatct 420
gcacagtgtt atggcaccct acttcttgca gcaacgggac accctgcggc gccatgtgca 480
gaaacaggag gccgagaacc agcagctggc agatgccgtc ctggcagggc ggaggcaggt 540
ggaggagctg cagctacagg tccaggccct cgag 574

```

<210> 2082

<211> 464

<212> DNA

<213> Homo sapiens

<400> 2082

```

gaattcggcc aaagaggcct agtaggattc catttccgtt tctaagtttt tagatattac 60
aaagtacccta tatatatgat aaacacttaa cccagatata aattttctcc tcttttataa 120
aactcagtta tgtttttgaa taataataaa aaatccacca aatgcggggg aaaaacacca 180
gttttaggaaa agccacgctg tgcaactttc acagataacc acatacgttg gagttgacct 240
ttcacatttc tttttttcca aaattagagc aaagagtcag cttaaacaaa aaaaaaaccc 300
tgaaatttac aacatggtga ttagtttaaa aaagaaacga gaagggtctc gcgaggggaga 360
cgccacaaac caagcttgga aagcaaaatc atttttgttt ctctttggca acaacaataa 420
cgaggaatct ttttagtaaa atgaagctaa agcttctcct cgag 464

```

<210> 2083

<211> 168

<212> DNA

<213> Homo sapiens

<400> 2083

```

gaattcgcgg ccgcgtcgac caaaagtgtg gagtgaccag caagaggcca atagatgtgg 60
gggtggggaa gaatattctc attcctgtgg tatgttgagc ttccggcatg ttcagaacaa 120
cctgatgaga aattctacaa cagaaaaaat cgaaccaaga gactcgag 168

```

<210> 2084

<211> 547

<212> DNA

<213> Homo sapiens

<400> 2084

```

gaattcggcc aaagaggcct aagggttaaga agatgaccca gggttcattgt gtgacagttg 60
ggattagaac ctaggcagcc tgggccagag tatgtgtctt taacaactac agtttgatat 120
catccttttag tttttttttg tcattcagaa cggtttactt ttgcatatag tattatctat 180
tacagtagtt aagacaatgc agtctcatct aaaccctaac tcatttaatc ctcaagacaa 240
ccatgtggga tagatgtgag aattttatag atgaagtaac aggtctagag aaatagtcgt 300
ctagtccacac aactagtaag tgactgggat tcaaatcaga taggcaccaa aagctcaagc 360
tcttttttga accatttcaa ttcctttttt tgttgtgtgt ggagacggag tctcactgtg 420
ttaccacaggc tggagtgcag tggcgcgac tcagctcact gcaagctctg ccttctgggt 480
tcacgccatt ctctgcctc agcctcctga gtagctggga ctacaggcgc ccacccccac 540
cctcgag 547

```

<210> 2085

<211> 488

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (67)

<400> 2085

```

gaattcggcc aaagaggcct agaattatat atccatatat atatatatat atatatatgg 60
taaacangca cacacaattt tatccaatgc aaacaaatgt agagcatcag ttacaaaacc 120
ctcgaatagc ttgagagccc cacgggctct gccacacccg tgacttcac cacttgacg 180
tcacccgcgg gggctcccc tgcacatttg cacacgatcc ggagagccga aggcgcgtg 240
cttctgttca catgggctgt aatcatttgt agtttccaaa gacacgtctg catttgaatt 300
tctagatttt cgaggtaagg agtttttttt taattgggtt tttggaaaat cacatcatgc 360
ctagaatctg aaattgaatt agcaagaacc gactgtttgc attttccata tatcctttta 420
tctgtctttt ttaaattgtt aattctaata atttcaaaat gcattcactg aagaaatgga 480
cactcgag 488

```

<210> 2086

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2086

```

gaattcgcgg ccgcgtcgac ctgcagcccc gaccaaacac acaggaacca ggagtggacc 60
tgctggggct ggaggattat gaaataggaa gcaggagct cagatacctc tggtgccctc 120
caactgcagg acaactctca gaattgtcaa actgaaccct taagggagtg tcacccaaaa 180
agcccacata ggaagtcgac acccacaaaa ataatattg caaacaaaag ttctcacata 240
cacttcacac tcattcatac ttttctctg agaaccgaga aagcctggct ccaaagagtc 300
tcagattctc atgaaaagta gagatcttag acacagcttg ttcaacgaca ggggtcatac 360
gcctgggtca agacaatcaa tttgccttgt caagcaatac caaaataatc atctggcttg 420
ttacaaaagt atctccaggc tccaaggga gcagaaggga cccggcagcc tgcacagcct 480
aaaccgtcga ttgaattcta gacctgcctc gag 513

```

<210> 2087

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2087

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctgacctgc ctgcagccgt 60
gcagaatata ttatcatggt aaatacagtt acaaggctgc ttctatttta ttattttttt 120
gagacggagt ctactctgt tgcccaggct ggagtgcagt ggtgcgatct tggctcactg 180

```

caacctccgc ctccctgggtt caagcaattc tcctgcctca gcctcccaaa gtgctgggat 240
 tacaggcgty agccactgcy ctcagcagta ttgtcatttt ctaatatattc tatttactgt 300
 tggaggagcc tcgag 315

<210> 2088

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2088

gaattcagcc aaagaggcct aattgtgatt taatgtaaat aaaggtttgt atagtacttt 60
 ttagtattctt aagtatgaag aaatgggtaa actttttatt ttgttagaaa ctgttatatt 120
 ttgagtgtaa tatttatggt ttatagcaaa atgaatgtgc ttattgttga atgcatgtat 180
 ttagaagcct ttactcagcc cctgtgttct gtgctaggag cttgagctct acaggtaagg 240
 cagagctacc ggtgaatgaa aggaaatcat gtcagtgaat aatcatgggt gaaagccct 300
 ggcacacat gtgcatgctg taggcaggac ctgagctgcc tccgctgcag gttcagatgc 360
 accgctgcag ctgtccttca gttagttcac agggctgcaa gaggaggaca catccctcca 420
 gaaaacagcc tgagccggga actggctgtg cttaaagagca ctgctatcaa gttgaggaga 480
 gagggcttcc gtgcactcga g 501

<210> 2089

<211> 465

<212> DNA

<213> Homo sapiens

<400> 2089

gaattcggcc aaagaggcct agaaccgggtg ccagcactct gcgaagtacc caagaatccc 60
 ctctgttttct ttttctctct gatcatacca tcatcacctc acaacttctt cactttctct 120
 tctcaagaat attaatcttag ttttcccat ttaattttta gaaaaataa aggaagaaaa 180
 tagcctttta atgtctgtgt gcttggcact ttccatgtta cttgtttcca tttgtagaat 240
 aaccctgtga tacggctgtt aactattagt tccccttttg gaagatgagg aaattgaggc 300
 tcttccctca gtagaacctg aagaatgagt tcttcatact tggctaattg agataagtgt 360
 gtgttggggg aggcattcca ggtcagaggc tatccagaag ggcaactaa gaaggaaagc 420
 tgggcctgcy aaaaacacac gcggaaccgc agcagcccac tcgag 465

<210> 2090

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2090

gaattcgcgg ccgcgtcgac aaataatatt tgcagtcaaa tggtttttct tgctgtaagt 60
 cctgtttag ctatgtttag ggtagtgggt ctcactctacc ttggagtgc taagacttac 120
 ctagcaggct tgtttaaaaa gttcagattc ctacttttgt acccagggat tgcctcaggt 180
 ggtatgggct gtggctcctg agtcactact ttataaata gtggttcaga gaccacagag 240
 agagactgct tcatcgaatt ggaagtactc gag 273

<210> 2091

<211> 160

<212> DNA

<213> Homo sapiens

<400> 2091

gaattcgcgg ccgcgtcgac cacaagaaag acgtggctct gacagacaga caatcctatt 60
 ccctaccaaa atgaagatgc tgctgctgct gctgtgttgg ggaactgacc tagtctgtgt 120
 ccatgcagaa gaagctagtt ctacgggaag gaatctcgag 160

<210> 2092

<211> 293

<212> DNA

<213> Homo sapiens

<400> 2092

```
gaattcgcgg ccgcgtcgac gagattaaga aatacacaac gctgtcctat cgagcaccag 60
aaatgggtcaa cctgtacagt ggcaaaatca tcactacgaa ggcagacatt tgggctcttg 120
gatgtttgtt gtataaatta tgetacttca ctttgccatt tggggaaagt caggtggcaa 180
tttgtgatgg aaacttcaca attcctgata attctcgata ttctcaagac atgcactgcc 240
taattaggtta tatgttgga ccagaccctg acaaaaggcc ggaatgtctc gag 293
```

<210> 2093

<211> 262

<212> DNA

<213> Homo sapiens

<400> 2093

```
gaattcgcgg ccgcgtcgac ccaaccacca agagaactat ttaccctgtt tgtagtgtac 60
acaacctttt cttttgtaag tcataatttac ctagattttg ttcaagaaaa tctgggtccc 120
acttagctgt tttagaaact agtacagaca gagactctcc tgaggaaatt agagctttta 180
tgattagaaa catgcttgtc taaaaatgag ggtcttagaa atcacaacat tgacccttat 240
gatgttgccc cctaagctcg ag 262
```

<210> 2094

<211> 197

<212> DNA

<213> Homo sapiens

<400> 2094

```
gaattcgcgg ccgcgtcgac cttacattat cttcttgatt atttttcttt aagatgcaag 60
tccatggatt ctattctgtt aggtattttg ctttctttcc tttttatttt tttagagaaa 120
ggactcactg tgttgcccag gctggtattg aactcctggg ctcaagtggg cttctcactt 180
cagcctcccg cctcgag 197
```

<210> 2095

<211> 190

<212> DNA

<213> Homo sapiens

<400> 2095

```
gaattcgcgg ccgcgtcgac aaaattctca ggctttacag caagcaaact tcactatgat 60
ttttacaatt ctgattctgt atcccctggg gggttatccca gttgcttctt taggatgggg 120
tttattacgt tgtacatata tcccgatgtg tctgtgtgaa tctttgtctt ttttggggga 180
ggggctcgag 190
```

<210> 2096

<211> 222

<212> DNA

<213> Homo sapiens

<400> 2096

```
gaattcgcgg ccgcgtcgac ggatatagaa ccttggacat ccattgcatg aagtattcca 60
ttcatgaagg acagactgtt caagtgtatg accactactg tggtgaccag cttaaaccctc 120
ctaccaaga actatgccat ggtaactgtg tcttcacaag atggcattat tcagaatggt 180
ctcagtgttc caggagtgtt ggaggagggg aaaggtctcg ag 222
```

<210> 2097

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2097

```

gaattcgcgg ccgcgtcgac tgaaggattt tggactcttg tgaatgggtg actggacttg 60
gctttacaga gtcgggtgct tttttctctc tgcaattacc tgcataagca ttttgtgctc 120
accacgaagg atgggtctctg ccttctcttg tcgggtgtatg ccattctgaac ctaggaaacta 180
cctcagag                                     187

```

<210> 2098

<211> 235

<212> DNA

<213> Homo sapiens

<400> 2098

```

gaattcgcgg ccgcgtcgac gtaaaagcta aaatccttat aagaccctgt gtgataggcc 60
catgattcat ttcctgacct cttttctgct gcaactcttg tccttctacc cattcattcc 120
ctcttttcta tcccttgaac atgtcaggca tgctcctgcc ttggtgagtg gtggcttttag 180
ctcttctggt tgtaacactc ttgccacagc taaccctcta actctccac tcgag      235

```

<210> 2099

<211> 199

<212> DNA

<213> Homo sapiens

<400> 2099

```

gaattcgcgg ccgcgtcgac tatatatata tttttgtatg tatacatata tacatcctct 60
atgtgacagg ggaagaagag ggtgtctggc atttattagg gacctaaata agttcagaat 120
attatgttta atctccttga ctacctatct agttacgcat ctctccact ttgctgatga 180
gaaaaatgag gctctcgag                                     199

```

<210> 2100

<211> 211

<212> DNA

<213> Homo sapiens

<400> 2100

```

gaattcgcgg ccgcgtcgac acaagatccc gaaggacagc atgacgcttc tgccctgctt 60
ctacttcgtg gagctgcccc tagtggcttc ttccatcgta tccttgtaact tcctggagct 120
gaccgacctc ttcaagccgg ccaagggtggg cttccagtgc tatgaccgca ctctctccat 180
gccctacgtg gagaccaacg aggagctcga g                                     211

```

<210> 2101

<211> 223

<212> DNA

<213> Homo sapiens

<400> 2101

```

gaattcgcgg ccgcgtcgac tgaaacattt ttgatacata acagacctca gtctttttta 60
aaaattaata ttttttcagg cgtatttttg tacagtgaag agggaaacatt cttgctgtgt 120
tttttcagta agactttcag gcacttcttc ctttttgatt tctttttttt cctctgtttt 180
ttagcatgca agtatgttgg tacgttatgt cctggttctc gag      223

```

<210> 2102

<211> 256

<212> DNA

<213> Homo sapiens

<400> 2102

```

gaattcgcgg ccgcgtcgac cataaatttt cttcaccccta aatattccgt tttgatagtg 60
aagattgggt tcctgaactt tcgattcaaa ctagaaatcc actatcattt atttatttat 120
tttttatttt ttgagacaga ggcttgctct gtcgcccagg ctggagtgtg ttggtgcgat 180
ccctcctagc ccttctctgt ccgctttgct cttgttctca tatctccagc catctctggc 240
tcacaccgac ctcgag                                     256

```

<210> 2103

<211> 286

<212> DNA

<213> Homo sapiens

<400> 2103

```

gaattcgcgg cgcgctcgac aaatgaagtt cgttctgctg ctttccctca ttgggttctg 60
ctgggctcaa tatgaccac atacttcaga tgggaggact gctattgtcc acctgttcga 120
gtggcgctgg gttgatattg ccaaggaatg tgagcgatac ttagctccta agggatttgg 180
aggggtgcag gtctctccac ccaatgaaaa cgttgtagtt cataacccat caagaccttg 240
gtgggaaaga taccaaccaa tcagctataa aatctgcaca ctcgag 286

```

<210> 2104

<211> 238

<212> DNA

<213> Homo sapiens

<400> 2104

```

gaattcgcgg cgcgctcgac gaaggcaagc ggtgattggt tgtagacggc gctttgtcat 60
gggacctgtg cgttgaggaa tattgctttt cctttttttg gccgtgcacg aggcttgggc 120
tgggatgttg aaggaggagg acgatgacac agaacgcttg ccagcaaat gcgaagtgtg 180
taagctgctg agcacagagc tacaggcgga actgagtcgc accgatcaat ctctcgag 238

```

<210> 2105

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2105

```

gaattcgcgg cgcgctcgac gagagataat aattgttcaa cctgaattga aatcacttgc 60
actgggtttc cactcaatgg ttatacgagc actaggagga attctagctc caatatattt 120
tggggctctg attgatacaa cgtgtataaa gtggtccacc aacaactgtg gcacacgtgg 180
gtcatgtagg acatataatt ccacatcatt ttctcagat tccagttcag aaatgagcat 240
tctcttcacc atcgcacact cagcaaaatc tgattcccct gagctcgag 289

```

<210> 2106

<211> 231

<212> DNA

<213> Homo sapiens

<400> 2106

```

gaattcgcgg cgcgctcgac cgattgatta ttcaaccagg atacctaat caagaactcc 60
agaaatcagg agacggagac atttgtcag ttttgcaaca ttggaccaa tacaatgaag 120
tattcttctg gtgctctggt tttggctgtc ctgggcacag aattgctggg aagcctctgt 180
tcgactgtca gatccccgag gttcagagga cggatacagc aggaactcga g 231

```

<210> 2107

<211> 212

<212> DNA

<213> Homo sapiens

<400> 2107

```

gaattcgcgg cgcgctcgac cgtcgattga attctagtgt tgtctcctag atgttctatt 60
cgaggtataa ttatctattc ataattttgg ttcttcttcc tagagagggg ggggtgtctga 120
tgtctctagt cagccatcct gaaccagaat cccaccata ttttaaatcc ctgcttgttg 180
ccctgggtatt tgacatcccc aaatcactcg ag 212

```

<210> 2108

<211> 231

<212> DNA

<213> Homo sapiens

<400> 2108

```
gaattcgcgg ccgcgtcgac ctctgaatca caccacattc tgtctttttc cacacaactc 60
agtataaaac tcctgaagta cgtgggttatt acgttgcaag aaaacatgag ccacagtcac 120
tcttccaaca ttctcttgac taatgtaaaa ttgacgtttg gtgctctgtt tctgtgcctt 180
tgtgcctatg cactaccttt ccatttcagt gctgaatcac ggacactcga g 231
```

<210> 2109

<211> 167

<212> DNA

<213> Homo sapiens

<400> 2109

```
gaattcgcgg ccgcgtcgac agaaattagg attaccgaaa atactgaaga aagactacct 60
ctgattggac tcttctcaag gaattaataa ttcaagaact aaggaaagaa aaaagtgtt 120
atatgaaaat actgaagttg atcgtagcag ctgaaggcat tctcgag 167
```

<210> 2110

<211> 300

<212> DNA

<213> Homo sapiens

<400> 2110

```
gaattcgcgg ccgcgtcgac cgctgattga attctacacc agctaacaga aaaaaagtct 60
catcaaatgt tattatatag ttcattggac caccagaga tccagagaat cagatttgaa 120
ggctacacag tcaagagttt tgccaggact gtgctggttg gaccactctt gcactggctg 180
tgctggacgt ttgactttcc tattaggagt tctgaaacag ctccctctgc agggcagatg 240
gctttcaccc aggtcatgat aaaatccgcc tggcacctgc ctccctcag tcacctcgag 300
```

<210> 2111

<211> 152

<212> DNA

<213> Homo sapiens

<400> 2111

```
gaattccggc ccgcgtcgaca gttaattgac ttatgtcatt tggagcaatg aaactattaa 60
caccaggtat attcagttcc tgcccttacc tatattttct tatcttgga ggggattgct 120
gtccctcacc atttatctca cagcaactcg ag 152
```

<210> 2112

<211> 209

<212> DNA

<213> Homo sapiens

<400> 2112

```
gaattcgcgg ccgcgtcgac cagctttgtg aagtccttgc tctctgtggg tctatgagtc 60
agcagcaaca ttggcctaac ctccgtccca gcttcctggc tcaccacatg tgtacagtgc 120
tgtttgcagt tgtactcatt atccatccat ctctctgcca tccccagca tcgctgggtg 180
taaaacgcaa actccccacc gacctcgag 209
```

<210> 2113

<211> 265

<212> DNA

<213> Homo sapiens

<400> 2113

```
gaattcgcgg ccgcgtcgac cctagggcct aaagatgctg aggtctgtat ggaattttct 60
gaaacgccac aaaaagaaat gcattcttct gggcacggtc cttggaggag tatataattct 120
ggggaaatat ggacagaaga aaatcagaga aatacaggaa agggaggctg cagaatacat 180
```


tgcccaagca cgacgacaat atcattttga aagtaaccag aggacttgca atatgacagt 240
gctgtccatg cttccaacac tcgag 265

<210> 2114
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2114
ggctctactac ttcacatcatgg cttgtgacca atacagctgc gccctgaccg gccctgtggt 60
ggacatcgtc accggacatg ctcggctctc ggacatctgg gccaaagactc cacctataac 120
gaggaaaagcc gccacgctct ataccttggt ggtcaccttc cagggtgcttc tgtacacgtc 180
tctccctgac ttctgccata agtttctacc cggctacgta ggaggcatcc aggagggggc 240
cgtgactcct gcagggggtg tgaacaagta tcagatcaac ggtcctctcg ag 292

<210> 2115
<211> 145
<212> DNA
<213> Homo sapiens

<400> 2115
gaattcgcgg ccgctgcgac caataaagtt caagaaaaaa gaggtgctgt ctatgaacga 60
gtaaccacaa ttaatacaaga aatccaaaaa attaaacttg gaattcaaca actaaaagat 120
gctgctgaaa gggaggggtac tcgag 145

<210> 2116
<211> 437
<212> DNA
<213> Homo sapiens

<400> 2116
gaattcgcgg ccgctgcgac gcttcattga aaagtacctc tactctggct atgctgaact 60
ttgggtcaaag tgctattttc agtgtcggtt taacagctat aatgggtgctc gccagtcagg 120
gaattgtggc aggtaccctt actgttggag atctagtaat ggtgaatgga ctgctttttc 180
agctttcatt acccctgaac tttctgggaa ctgtatatag agagactaga caagcactca 240
tagatatgaa caccttgttt actctactca aggtagacac ccaaattaaa gacaaagtga 300
tggcatctcc ccttcagatc acaccacaga cagctaccgt ggcctttgat aatgtgcatt 360
ttgaatacat tgaggggccag aaagtcctta gtggaatata ctttgaagtc cctgcaggaa 420
agaaaggggc gctcgag 437

<210> 2117
<211> 249
<212> DNA
<213> Homo sapiens

<400> 2117
gaattcgcgg ccgctgcgac gcatactcag ctttttactt agtgtcagtt gaggcatact 60
ctcaaaagtt tttccccccta aaatatcttt caagttatta ctgggtatttg aaatttcaag 120
tttagaaaatt catttctttt taactcaaag tgcaaatttc atataatgat tatgatgggt 180
ttagtgtcca tatttttgtg gcttcaactta tcattctctt cagcagtagc taccacagat 240
caactcgag 249

<210> 2118
<211> 211
<212> DNA
<213> Homo sapiens

<400> 2118
gaattcgcgg ccgctgcgac gatccgtgcg tgaagtaggc atatatcact aagctgtggc 60
tggaattgat taggaagcat ttggtagaag gactgaacaa ctggttgggat atatatatat 120

atatataatt tttttttttt aaattcctgg tggatactgt agaagaagcc catatcacat 180
gtggatgtcg agacttcacg ggctactcga g 211

<210> 2119

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2119

gaattcgcgg ccgcgtcgac ctctgcggca gagtccttag tggaggggtt tacctggaac 60
attagtagtt accacagaat acggaagagc aggtgactgt gctgtgcagc tctctaaatg 120
ggaattctca ggtaggaagc aacagcttca gaaagagctc aaaataaatt ggaaatgtga 180
atcgcagctg tgggttttac caccgtctgt ctacagagtc caggaccttg agtgtcatta 240
gttactttat tgaaggtttt agaccatag cagctttgtc tctgtcacat cagcaatttc 300
agaaccaaat cgctcgag 318

<210> 2120

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2120

gaattcgcgg ccgcgtcgac cgcttattggc aaatacatat aaataaacat ataaccggaa 60
cacgtttttc ccctttatcc aatggaaata cgatcaagca tcactcttag cagaagacta 120
ccagacactt gtagggacac gaaaagtgtat aataaaaaca atttatttat tgaatgcttg 180
ctatagacca gatgctcttc taagcacttt gtaattattt tatcttgaaa gcagtctctg 240
atttataatc attacctctt cttacagatg tggaagacgt gactcagttt cctgattacc 300
cagggtcaca taacatgtgt ggagaaggca ggatttacca cctcagtcag cagttcatgc 360
tcttaaccat aatgctgtac tcctcaaacc tgccactcga g 401

<210> 2121

<211> 302

<212> DNA

<213> Homo sapiens

<400> 2121

gaattcgcgg ccgcgtcgac ggggtaggtg ggcggcacag ctggggactg aggggtgctg 60
ttgctgtgga caggcttgga gccgtttttg gctggagact ggctgacttc actgtctgtg 120
gaacgtcccc tcttcttacc atcttcagag ttttccgtgg tacagttggc tgggctgggc 180
gggatgggag agctggaggt ggttgaggtg ggcgtgctgc tggactgggt gaagatctca 240
tcctccatgt ggctgtgggt ggggggggag gtggcgacca gcgcctgtgg aatgtcctcg 300
ag 302

<210> 2122

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2122

gaattcgcgg ccgcgtcgac ctttgtggca ttctgaaata ggattcatga tgatgctctg 60
tgatcttagg gacactacct cacctgccag tatctttggg gctgtgtcct tcaaggacat 120
gtccccagac tgctgtgcag tgtcattttt tgtgtttggg ttggtggtgg cttcttcccc 180
cctcgag 187

<210> 2123

<211> 195

<212> DNA

<213> Homo sapiens

<400> 2123

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gaattcgcg cgcgctcgac attgaattct agacctgcct cgagggccat tctcctcctg 60
atgttggttc ctttattatt tcatttattg tgttttttcg ggaatccgga tctacacggg 120
acacaaaaac tggttgcaca gcccgtaaca gtctgccaat cagagggact tgtgcattct 180
caggttctcc ctata 195

```

<210> 2124

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2124

```

gaattcgcg cgcgctcgac aatacctcca aaataccctt gacatttgct ccgttgccat 60
ttcctttttc cagtcttagt caccagttac ctgttccact actaacaggt tgccttactt 120
tctactttca tttgttcaat caattttcta ccctgtaccc ataatactcc taaaacacag 180
gtctgatcca gtgaagcctg acagaaaagc ttctctttcc tcattgcaca tagaataaag 240
cctcaatttt tatatttttc aagggacttt gcaatcttaa ccagttctac ttgttcattc 300
tatctcctac cttgccatgc acctcatatt tttgtcattt cttctgctac cccctccg 358

```

<210> 2125

<211> 226

<212> DNA

<213> Homo sapiens

<400> 2125

```

gaattcgcg cgcgctcgac tgtttatttg ccacagatca aaggttcaca aagtatatca 60
aatttacatc tacttggggt accttgatag attattattg tttttctttt atctttccct 120
tcagggaattt ggaaactcgt tgtcactttt ttttaatttta aaaatactaa attgtaatag 180
ttttcttttg ccaaatatgt acgcacacat ttgggttctc cctata 226

```

<210> 2126

<211> 183

<212> DNA

<213> Homo sapiens

<400> 2126

```

gaattcgcg cgcgctcgac gtgaatttaa gggtgtgatt tttgtttttg acttttttaa 60
gactttatct atttagagca gctttagggt cacagcaata ttgagaggat ggtacagaga 120
tatctcatat acttcctact cccacacata cagaggctg catttttagt agggggccctc 180
gag 183

```

<210> 2127

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2127

```

gaattcgcg cgcgctcgac accagttgct acccaagcat tgtgccaaaa ctatcagtca 60
agcagtgaat aagaaatcaa aaaagcagac tggttaagaaa ggggaacctg aaaggagaga 120
accaggtggt gagagcatga ggaaaaacag gctgggttggt accaaccttg ataaattgca 180
cactgcactt tctgagttat gcttctctat aaattatgta ccaaacatgg ttgtatggga 240
acataccttt accccacgag aatatttgac ttctcatctg gaaatacgct ttaccaagtc 300
aattgttggg atgactatgt ataatcaagc cacacacctc gag 343

```

<210> 2128

<211> 242

<212> DNA

<213> Homo sapiens

<400> 2128

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gaattcgcg cgcgctcgac gctgtattca tcttccatat agaaactcta taaccattaa 60

```

```

gcaataactc cctcattctc ccttcacttt cagctcctgg taaattctgt tcaacttcct 120
gtatgaattt gcctattcta gatatttcat gtaaattgaa tcatacaata ttgttccttt 180
tggtctcttc tatttcattt agcataatgt tgggtgttcat ccatattgcg gcaatcctcg 240
ag 242

```

<210> 2129

<211> 142

<212> DNA

<213> Homo sapiens

<400> 2129

```

gaattcgcgg ccgcgtcgac cgaaaaatta ttattcaag tgaaagggaa gaaaagtcgt 60
catcaaaaag aggattccct ttcttggagt aatagtgcct atttatcctt ggatgatgat 120
gctttcacgg ctcaccctcg ag 142

```

<210> 2130

<211> 298

<212> DNA

<213> Homo sapiens

<400> 2130

```

gaattcgcgg ccgcgtcgac ctgaataatc tcagttaacc tgtctttaag ttcactgact 60
attctgcctg cttgaatctg ctattgaaat cctctagtga tttttttatt aaaaaaaaaa 120
aatggagaca cagaagctgg gcagcctcca tggggcttcc acacactggg gcttgcttcc 180
ggccccagc gactccaagg ggatgagtga atttaactgg caaggagcaa tctgctgtca 240
ccctgggcct ctggaatcct ggcaggaaga ggccccacga ccaccacgga cactcgag 298

```

<210> 2131

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2131

```

ggtctcaaac tcctgggctc aaatgatctg cccaccttgg cctctcacag tgctgttatt 60
acaggctaca gccaccgcac ctgacctccc tagcacattt aaattttggg atgtttctag 120
tgataatctc agtattgtat atttgttttg tttttttgtg gggaaaaggg aaacaggcgt 180
gctcgag 187

```

<210> 2132

<211> 376

<212> DNA

<213> Homo sapiens

<400> 2132

```

gaattcgcgg ccgcgtcgac cccatcagct gctctgaagc tccatgggtgc ccagaatctt 60
cgctcctgct tatgtgtcag tctgtctcct cctcttgtgt ccaagggag tcacgctcc 120
cgctggctca gaaccatggc tgtgccagcc ggcacccagg tgtggagaca agatctacaa 180
cccttggag cagtgtgttt acaatgacgc catcgtgtcc ctgagcgaga cccgccaatg 240
tggtccccc tgcaccttct ggccctgctt tgagctctgc tgtcttgatt cctttggcct 300
cacaaacgat tttgttgtga agctgaaggt tcagggtgtg aattccagtc gccactcatc 360
tcccaactca ctcgag 376

```

<210> 2133

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2133

```

gaattcgcgg ccgcgtcgac caacaagatc tccagacctt acaagatggc cgccaccag 60
actgggacct gcctcatggt ggcagccttg tgctttgttc tgggtgctggg ctccctcgtg 120

```

```

ccctgccttc ccgagttctc ctccggctcc cagactgtga aggaagaccc cctggccgca 180
gacggcgctc acacggccag ccagatgccc tcccgaagcc tcctattcta cgatgacggg 240
gcaggcttat gggaagatgg ccgcagcacc ctgctgccc aaggagcccc agatggctgg 300
gaaatcaacc ccgggggggc ggccagagcag cggccccggg accacctgca gcatgatcac 360
ctggacagca cccacgagac cagctcgag                                     390

```

<210> 2134

<211> 235

<212> DNA

<213> Homo sapiens

<400> 2134

```

gaattcgcgg ccgcgtcgac ctttcatttt ctcaatatc tgcacagatt taaatactta 60
ttatttggtta gacattccta ggtacttgat atttttgatg ctgttgtaaa tgatgccttt 120
aacatttatt tcactttggt tgttgctgac atatagaaat aaaactggct gggcacgggtg 180
gctcacacct gtaatcccag cacttcggga ggccaaggcg gggcaaatcc tcgag       235

```

<210> 2135

<211> 225

<212> DNA

<213> Homo sapiens

<400> 2135

```

gaattcgcgg ccgcgtcgac ataaaaccgg cccggttctg tggaaagtgg gcggcggagc 60
caggggtccct ggaatggcgg agactctgtc aggcctaggt gattctggag cggcggggcg 120
ggcggctctg agctccgcct cgtcagagac cgggacgcgg cgcttcagcg acctgcgagt 180
gatcgatctg cgggcggagc tgaggaaacg gaatgtggac tcgag       225

```

<210> 2136

<211> 206

<212> DNA

<213> Homo sapiens

<400> 2136

```

gaattcgcgg ccgcgtcgac gaaagttctt agaaagtggg tatgtggctg gcctcagata 60
aggataaatt gctgagaaga aggagttggg ttttttttgt gtttttttgt ttcttgtttt 120
tgagacgggg tcttgctctg tctcccaggc tggagtgcag tgggtgcgac acagctcact 180
gcagcctcaa cctcccaata ctcgag                                     206

```

<210> 2137

<211> 156

<212> DNA

<213> Homo sapiens

<400> 2137

```

gaattcgcgg ccgcgtcgac ccactgctca gccagaatgg tactcccaat ttgtttaatg 60
ttttcgctgc tagttgcagt aattcctttg cactcttccg aaaggccaca gcttccacag 120
tgttatcatc aaggtactgc tgaaagaatg ctcgag                                     156

```

<210> 2138

<211> 441

<212> DNA

<213> Homo sapiens

<400> 2138

```

gaattcgcgg ccgcgtcgac gaagcatttg gcacagaagt gctgccaggg agaaactaag 60
ttgctgaacg gaactctcca acaataaata catttgataa gaaagatggc tttaaaagtg 120
ctactagaac aagagaaaaa gtttttctact ctttttagtat tactaggcta tttgtcatgt 180
aaagtgaact gtgaatcagg agactgtaga cagcaagaat tcagggatcg gtctggaaac 240
tgtgttcctt gcaaccagtg tgggccaggc atggagtgtg ctaaggaaat tggcttcggc 300

```

tatggggagg atgcacagtg tgtgacgtgc cggctgcaca ggttcaagga ggactggggc 360
 ttccagaaat gcaagccctg tctggactgc gcagtggatg accgctttca gaaggcaa 420
 tgttcagcca ccacccctga g 441

<210> 2139
 <211> 112
 <212> DNA
 <213> Homo sapiens

<400> 2139
 gaattcggcc aaagaggcca ttcaaaatat gaggaattta ctactttatg tcctgctctc 60
 taaactacat cctgaactcg acgtcctgag gtataataaa acagagctcg ag 112

<210> 2140
 <211> 128
 <212> DNA
 <213> Homo sapiens

<400> 2140
 gaattcggcc aaagaggcca ttcaaaaaag taggtaaaaa aagaaaagg tagataatct 60
 ttcgtatgca aacttttccc ttatatcttg tctttctttc ctttttgact ttagtagcat 120
 cgctcgag 128

<210> 2141
 <211> 190
 <212> DNA
 <213> Homo sapiens

<400> 2141
 gaattcggcc aaagaggcca ttcaaaatag ctaaatattt agaagtatat cttgacacct 60
 agcacaaatg ttttggttaa gtatcttaaa actgatggat ggtatggctg gggcagcatg 120
 gctcacgctt gtaatcccag cactttggga ggccaaggcg ggtgaaccac ctgagggtcag 180
 gaattcgcag 190

<210> 2142
 <211> 119
 <212> DNA
 <213> Homo sapiens

<400> 2142
 gaattcggcc aaagaggcca ttcaaacctc agaaggccaa agaggccatt caaacctcag 60
 aaggccaaag aggcatttca aacctcagaa ggccaaagag gccattcaaa tgcctcgag 119

<210> 2143
 <211> 128
 <212> DNA
 <213> Homo sapiens

<400> 2143
 gaattcggcc aaagaggcca ttcaaaaaag gaagacggta ataaatagct tatttccaga 60
 attgcctatt gattcttttg gatccttata aaaacaaat catgcttttt aaatctgtgt 120
 atctcgag 128

<210> 2144
 <211> 126
 <212> DNA
 <213> Homo sapiens

<400> 2144
 gaattcggcc aaagaggcca ttcaaaactt actgctcatt ttactttttg catggaatac 60

agccatttag tcctaataata cataccaatg agacaattaa aaattgggtg gaagatgggtg 120
ctcgag 126

<210> 2145
<211> 205
<212> DNA
<213> Homo sapiens

<400> 2145
gaattcggcc aaagaggcca ttcaaaaaat gtatttattt tcagcattaa aatgcttcca 60
aaagatcaag ttgcttttgt ttgtttgttt ttttaaccgt aatgtagatg gagaaattgg 120
aggcaacctc agtataggaa ctgccacttt gagcagttta ggtcttaaag agaaagtcaa 180
tctaattgcca ataggagaac tcgag 205

<210> 2146
<211> 104
<212> DNA
<213> Homo sapiens

<400> 2146
gaattcggcc aaagaggcca ttcaaaaaaa tgaaagcaag ttatgtatgc tattttgtaa 60
ttttctcttt taacattatc tctacctttt catgtcagct cgag 104

<210> 2147
<211> 160
<212> DNA
<213> Homo sapiens

<400> 2147
gaattcggcc aaagccaaag aggccattca aaaactaagg tatcaaattg tagtggaaat 60
aatccaggcg actacaatta gcagctttcc ccaactgaag aggcacaaag gtaaagaaac 120
tgccggcaatg aaagctgac tcctgagggc cactctcgag 160

<210> 2148
<211> 131
<212> DNA
<213> Homo sapiens

<400> 2148
gaattcggcc aaagaggcca ttcaaaatca ttataatatc cagtagctaa cattagatct 60
agcttattat ttcagaaatt aatttaggaa ataattatta aaacatgttg gctacagtag 120
cacttctcga g 131

<210> 2149
<211> 168
<212> DNA
<213> Homo sapiens

<400> 2149
gaattcggcc aaagaggcca ttcaaaagag taatttgtga atttgttttg tatttataaa 60
atttatacct gaaaaatgtt ccttaatgtt ttaaaccctt tactgtgttt ttattcctct 120
aacttcctta atgatcaatc aaaaaaagta acaccctccc cgctcgag 168

<210> 2150
<211> 159
<212> DNA
<213> Homo sapiens

<400> 2150
gaattcggcc aaagaggcca ttcaaaaact tcatttgttt gagaaagaat gatattaatg 60

tgctttgtat gcctcctttt cagggtgggc atctcccttg cttttgagcg ccacccacct 120
cgtggccttc tggaggccaa gtccgctgtg ctccctcgag 159

<210> 2151
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2151
gaattcggcc aaagaggcca ttcaaaaatg ataaacatac tggctgttgt ggtgacaatg 60
acccaattga tgtgtgtgaa attggaagca aggtcactcg ag 102

<210> 2152
<211> 120
<212> DNA
<213> Homo sapiens

<400> 2152
gaattcggcc aaagaggcca ttcaaaaatg catagacaat ttgaagtttt tgatatattt 60
gtgatattta tcttgagcac tgcaatctca ccccccccg cccaccaag gaaatctcgag 120

<210> 2153
<211> 134
<212> DNA
<213> Homo sapiens

<400> 2153
gaattcggcc aaagaggcca ttcaaaaaaa aaagttacca agccatgagg ttcaacatga 60
ttttggcata cattttgttc ttagaagtat ctggatcaca ggataaaatc agaaacgttg 120
gcacaaccct cgag 134

<210> 2154
<211> 144
<212> DNA
<213> Homo sapiens

<400> 2154
gaattcggcc aaagaggcca ttcaaaaaag agtcactcag tatcagggat ctactgtctt 60
tgttcaaagg tcaaataaaa acctagtctc cttttattct accttctatt cttagctaga 120
atgaaactca gcatattact cgag 144

<210> 2155
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2155
gaattcggcc aaagaggcca ttcaaaaaat atgaagtata taaagcacct atgttatcta 60
ctttactgga tacataagtg ttcagtgaat gggaaacctc tcgag 105

<210> 2156
<211> 117
<212> DNA
<213> Homo sapiens

<400> 2156
gaattcggcc aaagaggcca ttcaaaaatg gagacagcta tttgccttgt actttttcca 60
caattgttgc tgctagtgtg acacatctct agttcagctc ttgcccacag actcgag 117

<210> 2157

<211> 117
<212> DNA
<213> Homo sapiens

<400> 2157
gaattcggcc aaagaggcca ttcaaaaatg ttgaaggagt tgggtgtgct gaattgcttt 60
ttaacacaat tcaggcagct gacattgata ccagatctga attctacaaa cctcgag 117

<210> 2158
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2158
gaattcggcc aaagaggcca ttcaaaaag tgtcagacaa aaatttaact ttttatgaga 60
tttcagtttt tgaaatacac aactcttaca gcacaaacac tcgag 105

<210> 2159
<211> 156
<212> DNA
<213> Homo sapiens

<400> 2159
gaattcggcc aaagaggcca ttcaaaaatg ggacctgtga agcaactgaa gaaaatgttt 60
gaagcaacaa gattgcttgc aacaattgtt atgcttttgt gtttcatatt taccctgtgt 120
gctgctcttt ggtggcataa gaaggacaa ctcgag 156

<210> 2160
<211> 104
<212> DNA
<213> Homo sapiens

<400> 2160
gaattcggcc aaagaggcca ttcaaattac aatttgaaaa gaaaactatt ttttttaaat 60
attccattgt taactgaatg ttactgtttc cactcctact cgag 104

<210> 2161
<211> 129
<212> DNA
<213> Homo sapiens

<400> 2161
gaattcggcc aaagaggcca ttcaaaaag aaacggatga agctttcttc cttggatgtg 60
ttcatcattg gtgcagtagc caaagcgatt gccaccacgg tgacctatcc cctgcagacg 120
gttctcgag 129

<210> 2162
<211> 117
<212> DNA
<213> Homo sapiens

<400> 2162
gaattcggcc aaagaggcca ttcaaagaaa ttaactgaac aaataaaaag tttttgatat 60
aacttcaatt aattgtacca catgctaata ctgaagagat gtgtagatat cctcgag 117

<210> 2163
<211> 101
<212> DNA
<213> Homo sapiens

<400> 2163
gaattcggcc aaagaggcca ttcaaaatgg agccagttac atacttcac acatttgcaa 60
attctatggt cttttttgca tactttaacg tcactctcga g 101

<210> 2164
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2164
gaattcggcc aaagaggcca ttcaaaaatt ctgactatct ttaagacaaa agtctgttaa 60
acttttttat tgtaaagaat atttattatg cgaatcctcg ag 102

<210> 2165
<211> 130
<212> DNA
<213> Homo sapiens

<400> 2165
gaattcggcc aaagaggcca ttcaaaaaat gagtggttga cgctcgaagaa taaagttgtt 60
gggtatcctg atgatggcaa atgtcttcat ttattttatt atggaagtct ccaaaagcag 120
aagcctcgag 130

<210> 2166
<211> 104
<212> DNA
<213> Homo sapiens

<400> 2166
gaattcggcc aaagaggcca ttcaaaactag cactttatct taaaaagtaa cttattaatc 60
acacattgat ggtacacctt gtatttagca aatggttgct cgag 104

<210> 2167
<211> 116
<212> DNA
<213> Homo sapiens

<400> 2167
gaattcggcc aaagaggcca ttcaaaaaca aaggtatggt gtttttcttc cttttgggta 60
aacatatatc ctttatatat atgacatttc atgccacata tgcaaacaca ctcgag 116

<210> 2168
<211> 112
<212> DNA
<213> Homo sapiens

<400> 2168
gaattcggcc aaagaggcca ttcaaaaaac aaagatgtat ggcttatttc aaacatcatt 60
ttactttgga tatatggcgg tatttagcac agccttgggg aacactctcg ag 112

<210> 2169
<211> 167
<212> DNA
<213> Homo sapiens

<400> 2169
gaattcggcc aaagaggcca ttcaaagaca cagtatacat tcttctttga atctgtgtga 60
tattttgaac tctgtgttga gctcttcaca tcttgaatta aatgaggaaa ttaattgtgt 120
tgatatacct aatgctaaat gacgagttaa tgggcgcagc actcgag 167

<210> 2170

<211> 139

<212> DNA

<213> Homo sapiens

<400> 2170

gaattcggcc aaagaggcca ttcaaaaaat gtgtatagtt atgtgtatac taactctgag 60
tcttggtacc ctggttagtc tggtaggacc aatacttttt ggtaggattg ccatgcagca 120
tcatgataat gcactcgag 139

<210> 2171

<211> 110

<212> DNA

<213> Homo sapiens

<400> 2171

gaattcggcc aaagaggcca ttcaaaaaaa tgttctctaa atattttctg cttcttgag 60
gtctcttttt actagatcat ggctgttctt cccaccccat ccctctcgag 110

<210> 2172

<211> 101

<212> DNA

<213> Homo sapiens

<400> 2172

gaattcggcc aaagaggcca ttcaaaaaat aaaaacctag tctcctttta ttctactttc 60
tattcttagc tagaatgaaa ctcagcatat atacactcga g 101

<210> 2173

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2173

gaattcggcc aaagaggcca ttcaaaaaaa acatttcaga ttttaatccg aatttagcta 60
atgagactgg atttttgttt tttatgttgt gtgtcacaaac tcgag 105

<210> 2174

<211> 107

<212> DNA

<213> Homo sapiens

<400> 2174

gaattcggcc aaagaggcca ttcaaaatga gagatataat ttacaaattt ttttattcta 60
tgggttttcc tttcactttc ttgatttctt tggagcacga cctcgag 107

<210> 2175

<211> 145

<212> DNA

<213> Homo sapiens

<400> 2175

gaattcggcc aaagaggcca ttcaaaaaaa cgattggaga aagggtgtaa agctgaacat 60
gaaaatcttt ttcgtgagaa tgattgcatt gtcaggatta atgatggcga ccttcgaaat 120
agaagatttg aacaagcatc tcgag 145

<210> 2176

<211> 122

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (56)..(57)

<400> 2176

gaattcggcc aaagaggcca ttcaaaagggt gcttccttttt aaaactagaa cttgggnata 60
ttgaatgtgt atttttcttt agtgaaatga tgttttatgt tattatgtgt gaagtactcg 120
ag 122

<210> 2177

<211> 121

<212> DNA

<213> Homo sapiens

<400> 2177

gaattcggcc aaagaggcca ttcaaaatat ttgtatttc aaaagatttc tacttttagc 60
agacaactga aaaagtattt ttctaattct tgaaatgtac actacatccc tcacccctga 120
g 121

<210> 2178

<211> 126

<212> DNA

<213> Homo sapiens

<400> 2178

gaattcggcc aaagaggcca ttcaaaaacg gtgaaagaga atccctgttg tactttatct 60
ttttgtaata ttatttttga atttttcatt atgttgcttt tgaaatttga tgcattcctc 120
ctcgag 126

<210> 2179

<211> 115

<212> DNA

<213> Homo sapiens

<400> 2179

gaattcggcc aaagaggcca ttcaaaaaaa taaaatgaaa aatctttttt taataatttc 60
atccctatct atagttttta tattaatttg tttttcttat ccaagatata tcgag 115

<210> 2180

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2180

gaattcggcc aaagaggcca ttcaaaaatg cgtttctgtt tagctctgat gctcagcact 60
tggcttggag agggaggcca ggaggctggg gccggttag cgcgtgaact cgag 114

<210> 2181

<211> 144

<212> DNA

<213> Homo sapiens

<400> 2181

gaattcggcc aaagaggcca ttcaaaaata aaagcagagg aagaaaaatt caatagtttt 60
aaactgcttt acaattataa acaaaaaaag attatacaga aaattaactg acaaatgaga 120
aaaatatttg caacaactct cgag 144

<210> 2182

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2182

gaattcggcc aaagaggcca ttcaaaaatt cagagaggat tcattggata gcgttctttt 60
tttaaagaag attgatagat gctggcaaaa ccattgctac tcgag 105

<210> 2183

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2183

gaattcggcc aaagaggcca ttcaaatgat gtgcaaatta gctttttatc ttctagcatt 60
tttttactac ctatatggca tgatctatgt ttggtgagc tcttagaaca acacacagaa 120
gaattgaacc tcgag 135

<210> 2184

<211> 117

<212> DNA

<213> Homo sapiens

<400> 2184

gaattcggcc aaagaggcca ttcaaaacaa ccctgaaatc tattttgaaa agaaaaggca 60
ccagtgatat cagtgatgaa tctgatgaca ttgaaatttc ttccaagtct actcgag 117

<210> 2185

<211> 113

<212> DNA

<213> Homo sapiens

<400> 2185

gaattcggcc aaagaggcca ttcaaatga tgatggttct tcctttattg atatttgtgc 60
ttctgcctaa agtgggtcaac acaagtgate ctgacatgaa acggcggtctc gag 113

<210> 2186

<211> 113

<212> DNA

<213> Homo sapiens

<400> 2186

gaattcggcc aaagaggcca ttcaaaaata ctggatcttt taaaaaacag tgtcaaataa 60
gcttagtggt aggttggtctg atgagaacca atctaataatg gggagcactc gag 113

<210> 2187

<211> 108

<212> DNA

<213> Homo sapiens

<400> 2187

gaattcggcc aaagaggcca ttcaaaaatg tttgtttcta agtatttttg tattgtgtac 60
attctgtata ttttgtgtgt aacatattat ttgagcacia gactcgag 108

<210> 2188

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2188

gaattcggcc aaagccaaag aggccattca aaagacttgg ataacttttg ataaaagact 60
aattccaaaa tggccacttt gttcctgtct ttaatatcta aatacttact cgag 114

<210> 2189

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2189

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gaattcggcc aaagccaaag aggccattca aagattccta cagcgaatga tcaccgctcc 60
ctgcaccttc ttctgtttt atgggtcagt attacccttc acctgtctgc tggcaattcc 120
catctctgcc tccaaactag ccttagcccg gagaccctc ctcttctcca actaccaca 180
gctcgag 187
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<210> 2190

<211> 110

<212> DNA

<213> Homo sapiens

<400> 2190

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gaattcggcc aaagaggcca ttcaaaaaag aatagtagta actgtttcat agcaaacttc 60
aggactttga gatgttgaaa ttacattatt taattacag gctcctcgag 110
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<210> 2191

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2191

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gaattcggcc aaagaggcca ttcaaaaaat gaagcttgga aagattttca tggttctctt 60
cttcgatttt atgaaaatgg agaactctgt gatgccacc ctcgag 106
```

<210> 2192

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2192

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gaattcggcc aaagaggcca ttcaaaaaat ttcagttgga tttttagaag taacttaata 60
ctctaaaatt tatatggaaa aatgaagggt cccaatttgc tcgag 105
```

<210> 2193

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2193

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gaattcggcc aaagaggcca ttcaaaatat tttcatgttc aaaatttaag ttttacattt 60
ttactactgt taatttaaataaaaatttgtt ctgtggataa aatgaggttg gcagtgagtc 120
tcgag 125
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<210> 2194.

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2194

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gaattcggcc aaagaggcca ttcaaaaata atagaagtat attagttaac aggcaaacta 60
ttgcacataa accaaatctt tgcttaagca aaattttaga tgtattgtaa atgtattaaa 120
tacggactcc tcgag 135
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<210> 2195

<211> 101

<212> DNA
<213> Homo sapiens

<400> 2195
gaattcggcc aaagaggcca ttcaaaaaag gcaaaaaaaa ttaacctgga aaaaacattt 60
ctgctatggt taaatttttt ttgggaatga gaatgctcga g 101

<210> 2196
<211> 126
<212> DNA
<213> Homo sapiens

<400> 2196
gaattcggcc aaagaggcca ttcaaacaaa agaggccatt caaactcaga aggccaaaga 60
ggccattcaa aataaagggt agatttgatg ttttttttta gatttatttt tcttactcca 120
ctcgag 126

<210> 2197
<211> 111
<212> DNA
<213> Homo sapiens

<400> 2197
gaattcggcc aaagaggcca ttcaaacatg ataaggatgg tacttgcata tggatgaatta 60
ctactgttga cagtttccgc agaaatccta tttcagtggga caccactcga g 111

<210> 2198
<211> 129
<212> DNA
<213> Homo sapiens

<400> 2198
gaattcggcc aaagaggcca ttcaaaagagg gtggtatcta tctagtcgta aatattttac 60
tgtaaccaat ttcccatcaa accaagagcc atgcaatgct ttaaaagcct ttccagcatc 120
attctcgag 129

<210> 2199
<211> 114
<212> DNA
<213> Homo sapiens

<400> 2199
gaattcggcc aaagaggcca ttcaaacatc tcagggttgct gctgcttgtc tagtttaaaa 60
ggtcagatct attaatcagg aatgaaattt tatttgggat tcagtgtctt cgag 114

<210> 2200
<211> 100
<212> DNA
<213> Homo sapiens

<400> 2200
gaattcggcc aaagaggcca ttcaaaagct tgttttatga tctttttgcg taaattaatt 60
atacatgatt tctagatttt tggtcctcca cactctcgag 100

<210> 2201
<211> 182
<212> DNA
<213> Homo sapiens

<400> 2201

gaattcggcc aaagaggcca ttcaatttct tcataattat tgccatcact acttcactac 60
ttttcaggag aatgaaaaca gctgttggtt atttactgca ctcttctact tggctctgtct 120
gtctctgtct tggtagttgc cggtaggacag catggccgtg ccagcctccc actccgctcg 180
ag 182

<210> 2202

<211> 143

<212> DNA

<213> Homo sapiens

<400> 2202

gaattcggcc aaagaggcca ttcaaatga ctaagaaaca ttatcgtgtg tttttttgtt 60
tggtttgttt ttcatcctt tctcttctt tttcgttcaa aaattcagtt ccccatccta 120
gaccagactc ctccatcctc gag 143

<210> 2203

<211> 140

<212> DNA

<213> Homo sapiens

<400> 2203

gaattcggcc aaagaggcct ccagaagcac tgcgtatgaa gattattact accaccctcc 60
tctctgcgatg ccacctccaa ttagaggtcg gggctcgtgtg ggggggagag gtggatatgg 120
ctacccccca gatactcgag 140

<210> 2204

<211> 113

<212> DNA

<213> Homo sapiens

<400> 2204

gaattcggcc aaagaggcca tcatggagca gctgaaggag ttgaagcaga agggagaccg 60
agacaaagag agcttgaaga aggccatccg agcccagaag aagcggcctc gag 113

<210> 2205

<211> 109

<212> DNA

<213> Homo sapiens

<400> 2205

gaattcggcc aaagaggcca ttcaaatgcc tatcttctcc agtctacaag ttacatgttc 60
ccaccagca ttacagtctt tgaacatgtt atttccccac ttactcgag 109

<210> 2206

<211> 123

<212> DNA

<213> Homo sapiens

<400> 2206

gaattcggcc aaagaggcca ttcaaatgtg atcatgagat tgcagcaatt cagtcacatc 60
ttcaatgctt tacttccagt tctagttctc ttctgtttc cacacctagc caacgctctc 120
gag 123

<210> 2207

<211> 123

<212> DNA

<213> Homo sapiens

<400> 2207

gaattcggcc aaagaggcca ttcaaagagc aaagaagaca aaaactcaag gaacatctgt 60

tgagaagaaa aacgcttttt gcatacaagc aggaaaaatga gatgttatcc agtactactc 120
gag 123

<210> 2208
<211> 178
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (42)

<400> 2208
gaattcggcc aaagaggcca ttcaaaaata cagtactctt cngtacaaag aaaaaagtca 60
catcacattt aataagatga aaaaagcatt ggcctccatg gtaaccaa atctcagtcc 120
aatactttct attatgcaca atacctgac ttcaattgaa agtgatccac atctcgag 178

<210> 2209
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2209
gaattcggcc aaagaggcca ttctagtctc atcacccaag cttctctctgt gtacttcaag 60
taaaaagcca tcatgaaat ctggttcaca ggcacccctcg ag 102

<210> 2210
<211> 129
<212> DNA
<213> Homo sapiens

<400> 2210
gaattcggcc aaagaggcca tttgtttacaa ctccctatat aaatgcaatt cttcattctc 60
aagacattat ttgtgtgtt tcccactgg actcttccca aatgcaaacc aggccagtc 120
gcactcgag 129

<210> 2211
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2211
gaattcggcc aaagaggcca ttcaaattgc taattataat atttgtgtcg gtagaaataa 60
ctatagtctc ccttcagaa attcaccccc acgttctctg ag 102

<210> 2212
<211> 107
<212> DNA
<213> Homo sapiens

<400> 2212
gaattcggcc aaagaggcca ttcaaacatc tctttagtat tttccgcct aacacttaga 60
tcctgatcat attccaggaa aacatgaaag ttgcgatcat cctcgag 107

<210> 2213
<211> 152
<212> DNA
<213> Homo sapiens

<400> 2213

gaattcggcc aaagaggcca ttcaatatgc tcttcttggt tccatgtccc gacaaccaca 60
 gaggttttcc cactatcctt gtccctcatgg tattgatgta catgtttgcc atagcagaat 120
 tcatatttcc accaaccgac accccactcg ag 152

<210> 2214
 <211> 121
 <212> DNA
 <213> Homo sapiens

<400> 2214
 gaattcggcc aaagaggcca tgatgctgga cacactgtca aagtcaatct tctccacaat 60
 gttcttggtg ttaatgtctt cttcttggtt gggggctcca cttggcgcat gcgagctcga 120
 g 121

<210> 2215
 <211> 110
 <212> DNA
 <213> Homo sapiens

<400> 2215
 gaattcggcc aaagaggcca ttcgaggttg tcaggactaa gagaagtcac aaaacagcag 60
 atttcccaag agcagcggaa aatgatccag tcacagtcgt cacgctcgag 110

<210> 2216
 <211> 118
 <212> DNA
 <213> Homo sapiens

<400> 2216
 gaattcggcc aaagaggcca ttcagcatga cgcagtggaa aaaaacattt cgagtctata 60
 gacctggacc agtgggaagac ctgggttgga attctactct gcacttccgc agctcgag 118

<210> 2217
 <211> 148
 <212> DNA
 <213> Homo sapiens

<400> 2217
 gaattcggcc aaagaggcca ttcaactcag agcatttcac tcaagaatgc atttgctccc 60
 actcgcttcc ttgcttccaa gtctgctgat taaaattcca tccaacttga aagattttgt 120
 aaactattcc cacaagacag aactcgag 148

<210> 2218
 <211> 116
 <212> DNA
 <213> Homo sapiens

<400> 2218
 gaattcggcc aaagaggcca ttcaggattg gaatggtttt cttttgtttt tttgttgttg 60
 ttgttgttgt tttgagatgg agtctcgctc tgtcaccag gccggagtgc ctcgag 116

<210> 2219
 <211> 169
 <212> DNA
 <213> Homo sapiens

<400> 2219
 gaattcggcc aaagaggcca ttccgttttg agtctctgga gcctgaactc tcaccatgta 60
 ccagaaaaga atgccccctt ttcgaacttt caaacagttg ggattatttt tgtttcttat 120
 catcccaatt atttgcctca gtttgcctcc attgggtccc ggcctcgag 169

<210> 2220
 <211> 120
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (16)

<220>
 <221> unsure
 <222> (112)

<400> 2220
 gaattcggcc aaagangcca ttgtaatcat catagcctcc atagcctcca ccataagcac 60
 cagcctcat cctctcaaag ccagctctc tgccaatgct gttataccct cntctcgag 120

<210> 2221
 <211> 103
 <212> DNA
 <213> Homo sapiens

<400> 2221
 gaattcggcc aaagaggcca ttcaaacagc aaataaagaa aatccatagc tactaagata 60
 actgttctct cttcatatga tactaacagg cttatggctc gag 103

<210> 2222
 <211> 130
 <212> DNA
 <213> Homo sapiens

<400> 2222
 gaattcggcc aaagaggcca taaattatct tttacttttt ggcaaattgt tacagtttat 60
 ggggtctaca atttattttt ttattttctg gcttaagtta tctaggattt gtttctgtgg 120
 tactctcgag 130

<210> 2223
 <211> 181
 <212> DNA
 <213> Homo sapiens

<400> 2223
 gaattcggcc aaagaggcca ttcttacggt actaaaaatt attgaatata ctcttttcaa 60
 attatttaat atgacccaaa attttagaaa tgtgtgttct ctcatactaa tgataatgac 120
 ccttaactta gaaaactgtg ctaaaattat agctattaaa aatcttcctg aagggtctga 180
 g 181

<210> 2224
 <211> 143
 <212> DNA
 <213> Homo sapiens

<400> 2224
 gaattcggcc aaagaggcca ttccatttag caactgatca ttttgagaac tgataccaag 60
 ctgtatgtcc aagatctctt caattgggtc actttgtcca tcaggttcat cagtatcaag 120
 tgctgaaagc tctaactctc gag 143

<210> 2225
 <211> 152
 <212> DNA

<213> Homo sapiens

<400> 2225

gaattcggcc aaagaggcca ttcaaagata aaatgttcaa attcctcatt tcactatatt 60
actcattttc aggcttttct gaaaatgagt cctgggtcaa ttactcgggg ggcggtcgaa 120
ggccgctgtc ccttcccgtc cccagtctcg ag 152

<210> 2226

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2226

gaattcggcc aaagaggcca ttcaagaatt taaaaaatga tatttaggta ccaagtccag 60
attgtaactc ttggaatttt tctcctggaa gcatttagtt atatttctgt cccctttcaa 120
aatgaacccc tcgag 135

<210> 2227

<211> 120

<212> DNA

<213> Homo sapiens

<400> 2227

gaattcggcc aaagaggcca ttcaaaagac aaactggata cattgagctt accagaaaga 60
aagtgaatca gcttgcatca caattctatg ttaaataatt tatttactat tacactcgag 120

<210> 2228

<211> 148

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (57)

<220>

<221> unsure

<222> (134)

<400> 2228

gaattcggcc aaagaggcca ttccctcgat acattcctgg ctttcttctg ggcaaanggg 60
tgccacattg gaagagggtg aaatataagt tctgaaatct ggtacacagg acttgcggt 120
gcagtcaccg aacnggggtt cactcgag 148

<210> 2229

<211> 161

<212> DNA

<213> Homo sapiens

<400> 2229

gaattcggcc aaagaggcca ttcaaatcac acatttctac accaatcatc ataagaaaaa 60
agtactctgt agtcgatctg tacatccaaa tgcatttggg aatctacacc tacgttacat 120
tatttaattgt tatatacatt tattaccac ccacactcga g 161

<210> 2230

<211> 203

<212> DNA

<213> Homo sapiens

<400> 2230

gaattcggcc aaagaggcca ttcccagggtg acctctgttc attttcata gggcctctga 60
agatgctatt ctcaacttta ttgattatta ttattctcag acagggctct gctctgtcac 120
ccaggctgga gtgcagtggg gcaatctcgg ctcaactgaa cctcacctcc ccggttcaag 180
gaattctccc actcaccttc gag 203

<210> 2231
<211> 106
<212> DNA
<213> Homo sapiens

<400> 2231
gaattcggcc aaagaggcca ttcaacagag gaagaaatca aatcatcctt tctagaaaca 60
ttaaaagttg cctgcagcaa gtctgatgaa gtgtcattgg ctcgag 106

<210> 2232
<211> 143
<212> DNA
<213> Homo sapiens

<400> 2232
gaattcggcc aaagaggcca ttctcgacac cctctgtaca cagcatgcgc tttatttggc 60
ttctcttacg cagcgtagtg actttcagat ttattcaagc tgctgcgtgc gccaacagtc 120
cactccttcc tagtgcactc gag 143

<210> 2233
<211> 161
<212> DNA
<213> Homo sapiens

<400> 2233
gaattcggcc aaagaggcca ttcaaccttg ttaaaagaaa ctgggaattc tgtagagtct 60
gctgactgct ttctgtatta gctatgttgg ttgttgetgt ggattgtgtg attgtagtgg 120
tgacactgct tgtgttagta cgccgggttg cactactega g 161

<210> 2234
<211> 114
<212> DNA
<213> Homo sapiens

<400> 2234
gaattcggcc aaagaggcca ttcagatatg tttatatcat tactagtaaa tggcacaatt 60
atattgtgtt gcagtgtgtt gatgttaaag tcaaaggctg cagcatgtct cgag 114

<210> 2235
<211> 150
<212> DNA
<213> Homo sapiens

<400> 2235
gaattcggcc aaagaggcca ttcaaagtat acacaaatat tatagtatta taaaatcagc 60
agataactgc attaacagga ctttacgttt aggaactaca tccttcatt tgaggattaa 120
aatatgtatc ttatatacca cttctctcag 150

<210> 2236
<211> 158
<212> DNA
<213> Homo sapiens

<400> 2236
gaattcggcc aaagaggcca ttcacaaata ttacagtttg ataaaaactt cacacacata 60

ctcccaaagt ctataccaga ttcagtcac tttactaaat cattcaaata ataaaagtaa 120
 tgaaaacatt attatatttt aaagcaataa gtctcgag 158

<210> 2237
 <211> 203
 <212> DNA
 <213> Homo sapiens

<400> 2237
 gaattcggcc aaagaggcca ttcaagaaga cttaaaaaaa atacaatatc caattagaaa 60
 agccatattt taaacatttg tacaagaata agctgctgaa acttagtaat tgaaatatga 120
 catctgtaca acaatttaca atagagctag aagggaattt atcattatcc tgcatagaac 180
 tggctctgcat ttggttcctc gag 203

<210> 2238
 <211> 136
 <212> DNA
 <213> Homo sapiens

<400> 2238
 gaattcggcc aaagaggcca tgaagttatc agatgttgca aacacatgct ttttgctttt 60
 tcacatggtt atgatctctc gtgtgtgtaa tgtgaggtcc caatgctccc acttctacgc 120
 ccaatcacag ctcgag 136

<210> 2239
 <211> 142
 <212> DNA
 <213> Homo sapiens

<400> 2239
 gaattcggcc aaagaggcca ttcaggtggc attgatctgg gagaagagca gcatcccttg 60
 ggcacaccca ctccaggacg caagcgaaga aggaagggag gagacagtga ttatgacgat 120
 gatgatgacg atgacactcg ag 142

<210> 2240
 <211> 178
 <212> DNA
 <213> Homo sapiens

<400> 2240
 gaattcggcc aaagaggcca ttcaacttgg gaaatctgaa ttacacgata ccccagaatt 60
 tccaaatgtc gtttttttca tagcagattt tcctttcatg tgagggatat ttctacaaag 120
 tgcttttgaa tccaaaaatt ccaaagcaat cctttcagcc cctggtggca tcctcgag 178

<210> 2241
 <211> 141
 <212> DNA
 <213> Homo sapiens

<400> 2241
 gaattcggcc aaagaggcca tttctttctc taagcagaag ggatagccac cattttctcc 60
 cctgactgct gcgtggtggg cacaggacag gcaggcgggg tctgaggagg ctgggtcatt 120
 tctgcctaag cgcacctcga g 141

<210> 2242
 <211> 130
 <212> DNA
 <213> Homo sapiens

<400> 2242

gaattcggcc aaagaggcca ttcaaagaga cacagagata cgctgagtga tacagagggt 60
 cagacacact ttcagaatca caacgacact cagagacaca aaaatgcatt tagggatact 120
 gatactcgag 130

<210> 2243
 <211> 132
 <212> DNA
 <213> Homo sapiens

<400> 2243
 gaattcggcc aaagaggcca ttcaaagaag agtcttatat gagatcaaat ggctgccttt 60
 ccccacaaga ttatatTTTT cctggtatgc tctactttga cacatgtggc tttctcagggt 120
 gagtacctcg ag 132

<210> 2244
 <211> 197
 <212> DNA
 <213> Homo sapiens

<400> 2244
 gaattcggcc aaagaggcca ttcaaactaa tttccaagat tctaaaagtt cttcataatt 60
 tgtctttctt cccattcctt cacattgacc tctgcaacct tattccttgc cagccattac 120
 caatgagaat attctctgat ttaccagaa agatcatgat ctttgaacta gctattcgtg 180
 ctacctcatc cctcgag 197

<210> 2245
 <211> 128
 <212> DNA
 <213> Homo sapiens

<400> 2245
 gaattcggcc aaagaggcca ttgtgaaaac tcctaaaata tagaatagca ggagcaaaga 60
 ggctctctag agaggaactg agtggtttta tatgaaattg tggccacatg aaactcagga 120
 tactcgag 128

<210> 2246
 <211> 114
 <212> DNA
 <213> Homo sapiens

<400> 2246
 gaattcggcc aaagaggcca ttcagtgtgt tgacaataat cagtctgttc tagtatctgc 60
 acatacctca gcgggaaaaa cagtatgccc cgagtatgcc attgcttcct cgag 114

<210> 2247
 <211> 238
 <212> DNA
 <213> Homo sapiens

<400> 2247
 gaattcggcc aaagaggcca ttcaaagata ccaatcaatt tcttactggg gaaatatata 60
 agaacttcca ggagtcacaa gagttccaaa caattaattt ataaaaataa caaaacattt 120
 gtctatgaaa aaaagatcag gattcactct catcgacgtc ctcactctgga tgggtgctcag 180
 catctcctt tctctgctgc tgtttcttcc acagtttggc tatttcagga atctcgag 238

<210> 2248
 <211> 148
 <212> DNA
 <213> Homo sapiens

<400> 2248
 gaattcggcc aaagaggcca ttcagttgcc ccggatctgt gtcattcttc tgragctttt 60
 cccactggga acttgatatt tccttgagat aaacagtcctg catagctttc ttcaaatgag 120
 gttcaatatt tctccacagt tactcgag 148

<210> 2249
 <211> 152
 <212> DNA
 <213> Homo sapiens

<400> 2249
 gaattcggcc aaagaggcca ttcaagaata cacactctgc aagttctaag cctgtattta 60
 gtctcaaacc accgctctgc acactacaaa gatttttgga taacgtatca catctagaga 120
 aaggcacaat gtatttccca ctatttctcg ag 152

<210> 2250
 <211> 190
 <212> DNA
 <213> Homo sapiens

<400> 2250
 gaattcggcc aaagaggcca ttcaaagggg ggtaagtggg attgtaaacc aaagtaaaaa 60
 taaaaaaatg ttatgcttgt tatgctatat gctctatttt tctgtctttt tatttttttt 120
 tgagacggag tctcactctg ttgcccaggc tggagtgcag tggcgagatc tcggctcacc 180
 gaacctcgag 190

<210> 2251
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 2251
 gaattcggcc aaagaggcca gggtcgtgaa gttcgtaaaag aagagcaacg ttatagtggg 60
 gaattatctg gcattcgtgc aggagttaaa aagagcatta agcttaaatg aagtttttgc 120
 ttagcataac actcgag 137

<210> 2252
 <211> 116
 <212> DNA
 <213> Homo sapiens

<400> 2252
 gaattcggcc aaagaggcca ttcagtgctg atccaggaat aaatttcacc ttttttaaca 60
 attccttggc tgcagtcctta atatccgtga tgtttataaa ccactgcttg ctcgag 116

<210> 2253
 <211> 149
 <212> DNA
 <213> Homo sapiens

<400> 2253
 gaattcggcc aaagaggcca tcaaatcaaa agtgaaaagg agtaaaactt ctaaggatgc 60
 taataaatct ctgccttctg ctgccttgta tgggattccc gagatcagca gcactggcaa 120
 gaggcaggaa gtccggggtc gctctcgag 149

<210> 2254
 <211> 101
 <212> DNA
 <213> Homo sapiens

<400> 2254
 gaattcggcc aaagaggcca ttcaaagaga acttgagatt caaaagaaaa ggctggataa 60
 attaaaatct gaggttaatg aaatggaaaa taatcctcga g 101

<210> 2255
 <211> 103
 <212> DNA
 <213> Homo sapiens

<400> 2255
 gaattcggcc aaagaggcca ttcaatttca tctctgtctc ccccgattgc catccagaat 60
 gctttggcca ccttttctgc atgcactttt cttcactctc gag 103

<210> 2256
 <211> 172
 <212> DNA
 <213> Homo sapiens

<400> 2256
 gaattcggcc aaagaggcca ttcaaaaggc ttgtgggttt tttaaaaact gttttaaat 60
 tcattcttca aaaatgttca gacatgacca cgttggtttc atcacagtgc ttatgaagtt 120
 tcttcatttt tcatgtgtcc aagcaggcct gaacaccccc actttcctcg ag 172

<210> 2257
 <211> 108
 <212> DNA
 <213> Homo sapiens

<400> 2257
 gaattcggcc aaagaggcca ttcaaacaaa taattaagca aatactttta tacttacaac 60
 tgtgacacaa tagccatgaa gaaaaagggtg ctgttgatga gtctcgag 108

<210> 2258
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 2258
 gaattcggcc aaagaggcca ttcaaaaaat atgtggtcaa gaactaaacc aaacaaacct 60
 ggatgatcct aggccaaaac aattcctttc caggcactcg ag 102

<210> 2259
 <211> 133
 <212> DNA
 <213> Homo sapiens

<400> 2259
 gaattcggcc aaagaggcca ttctttgcaa gtcatccatg ttgttactta ggcattttat 60
 cttggctcaa attgttgaag aatgggtggct tgtttcaaga agtgtggcaa gcaccaaccc 120
 cataaagctc gag 133

<210> 2260
 <211> 179
 <212> DNA
 <213> Homo sapiens

<400> 2260
 gaattcggcc aaagaggcca tttatgttta atgcaactat tgaaatgttt ggcttttagat 60
 ctaccattat gttgttttct gtttgttccc tgttttccat tgctgtttct tctttccttt 120
 tttccttccc tctatctct ccttctccct atacacacac acacacacca aggtctcgag 179

<210> 2261
<211> 109
<212> DNA
<213> Homo sapiens

<400> 2261
gaattcggcc aaagaggcca ttcataatac taaaaagtta aagattacct aaatctgtaa 60
cagtagaaaa ttatctaaat aaattatgaa atatacatcc atcctcgag 109

<210> 2262
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2262
gaattcggcc aaagaggcca ttcaaagtca tctaaccaaa taccttcccc cacagctaag 60
aaagaatccc agtgtttccc tagtttagag atgaagatac tcgag 105

<210> 2263
<211> 231
<212> DNA
<213> Homo sapiens

<400> 2263
gaattcggcc aaagaggcca caaatagtggt aacaaatcca aattgagtaa ctgtttctaa 60
gtactcatag aaaagcccaa ggggtccaaa actttcaagg tcatgacct gctcccatcg 120
actatacagc ttctcagagt ttgtccgagc ttttcggcgt ctccaccaat tcaaagccaa 180
gggataaatg gcttctttta tggttccaaa aatctgtttc ccgggtctcga g 231

<210> 2264
<211> 120
<212> DNA
<213> Homo sapiens

<400> 2264
gaattcggcc aaagaggcca ttcaaagaga attggtagag ggggttgatt ttttgagggt 60
cattaataac aaaataaaga agagatgctc ttgctgcaa tgggtctgtaa cattctcgag 120

<210> 2265
<211> 233
<212> DNA
<213> Homo sapiens

<400> 2265
gaattcggcc aaagaggcca tacagctctg ttcccatgaa cttcttccgc tcccatttgc 60
cgctcttcac cgaagccgct gcctggggaa tctgctggc caggcacatg atcattccac 120
aagtgagttc tgcggcactg aggctgttcc cattgggggt gttcataacc aagatgccct 180
tccttggtgc ggcctccaga tccacattgt ccacacctgt gccagccctc gag 233

<210> 2266
<211> 151
<212> DNA
<213> Homo sapiens

<400> 2266
gaattcggcc aaagaggcca ttcaaagata ggcttggtgg gacaaaacta atatgcatac 60
cacatacata tatttcttgt cttctttact gtcaatcttt cagaacagta acatgacatt 120
acaaacacct caaattccca cttctctcga g 151

<210> 2267

<211> 117
<212> DNA
<213> Homo sapiens

<400> 2267
gaattcggcc aaagaggcca tttagactat ctctttgcta atttttgctt actgctgtag 60
ggaagaagat ttccaatgaa ctttaaatat ctcattcatg tctaccattg tctcgag 117

<210> 2268
<211> 132
<212> DNA
<213> Homo sapiens

<400> 2268
gaattcggcc aaagaggcca aaggctaaga ctgtctaagt ccagatattc gaaagcaagc 60
taattattat tgaaactcta agatattatt aagaaggaca atcaagaaat gaaagctgta 120
cttggttctcg ag 132

<210> 2269
<211> 101
<212> DNA
<213> Homo sapiens

<400> 2269
gaattcggcc aaagaggcca ttcaaatagt tcgtacaact acagatacca gttctcatag 60
cttggcatat tcaaccatat atgaaaacgc atttcctcga g 101

<210> 2270
<211> 106
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (86)

<220>
<221> unsure
<222> (88)

<400> 2270
gaattcggcc aaagaggcca ttcacgattc agaattttct gtttaaaaat ctttcgaagt 60
atgttatatc acttattttc atcagnanaa cgtcatggct ctcgag 106

<210> 2271
<211> 148
<212> DNA
<213> Homo sapiens

<400> 2271
gaattcggcc aaagaggcca tttctgtttt catcatcatc agatccttct tctccctttg 60
gatgtcttct cctctttttc ttctttctct caccaccctc ctcattctca ccttcttgtt 120
cactgccact accctatctt ctctcgag 148

<210> 2272
<211> 115
<212> DNA
<213> Homo sapiens

<400> 2272

gaattcggcc aaagaggcca tgacttcatt ttcaaatatt tctggggctg tttgtatctt 60
gttcctttgt gaagtgtgtt gcagaaccga cgcttactgt gcaagagatc tcgag 115

<210> 2273
<211> 107
<212> DNA
<213> Homo sapiens

<400> 2273
gaattcggcc aaagaggcca ttcaaatctt atcaaatgaa actgttgcca ctcttaaatt 60
acacaaccgc tgtatttcag tgttcactg actcacaatc actcgag 107

<210> 2274
<211> 108
<212> DNA
<213> Homo sapiens

<400> 2274
gaattcggcc aaagaggcca ttcaatcttt cattttcctg ctcaatatta gccatttttt 60
cactagtcaa tattcctgat gcttttttca actgttcatt ttctcgag 108

<210> 2275
<211> 144
<212> DNA
<213> Homo sapiens

<400> 2275
gaattcggcc aaagaggcca ttcattacct tcgctcatga tcccagcagc catttttctt 60
aacaccttct gccactttct gtcggtgcta atggatggaa ctctgcaca agttttaact 120
gaacaagaaa cccaaggct cgag 144

<210> 2276
<211> 113
<212> DNA
<213> Homo sapiens

<400> 2276
gaattcggcc aaagaggcca ttcaacttcc atagtacatt ttacagttag caattcatac 60
aacagtatac aacagttagt atcttgagaa aaataaaaag ctgcatgctc gag 113

<210> 2277
<211> 176
<212> DNA
<213> Homo sapiens

<400> 2277
gaattcggcc aaagaggcca ttccatagct tgcctttttg ctctcagtta tttcctttga 60
tgcacaattt ttttacattt gatatagaca catttgtctg tttttggttt ttttatgtat 120
gctttggatg tcatacccaa gaaatctttg ccaaattccag tgtccagaat ctcgag 176

<210> 2278
<211> 140
<212> DNA
<213> Homo sapiens

<400> 2278
gaattcggcc aaagaggcca ttcataagaa agtggttatat ctagggtttt aaaactgaag 60
ttgaaattat ctttgtagc agtagtagta tagaataaaa gatccgtatg ctgggttcgta 120
gattgatacg tgtcctcgag 140

<210> 2279

<211> 128

<212> DNA

<213> Homo sapiens

<400> 2279

gaattcggcc aaagaggcca ttgatgtgtt tgtggaagct actcatgttg cccttgcatc 60
ggggagcctg gttagaactc tgtaacctga tcacagacaa agagatggta aattgtgatg 120
agctcgag 128

<210> 2280

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2280

gaattcggcc aaagaggcca ttcaaactgc tgctgttcaa aacgtgaaat gattctgctg 60
aatccattct tgatgtctct ctttagtggt cttctcatta gtggatcatc cgag 114

<210> 2281

<211> 110

<212> DNA

<213> Homo sapiens

<400> 2281

gaattcggcc aaagaggcca ttctcttccc ctgtgtgcct cagtgtcctt ctcatttcag 60
tagggacttc tgaaatgggg gaggcagtgt ggaataactgt gaatctcgag 110

<210> 2282

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2282

gaattcggcc aaagaggcca ttcaaaggga aacaaatata agtaatcctc tttgttctaa 60
acaaaaattc ataattatct atacatttta aaatattata ttgtttcaaa tgttggttagt 120
ggggcatatc ctcgag 136

<210> 2283

<211> 104

<212> DNA

<213> Homo sapiens

<400> 2283

gaattcggcc aaagaggcca ttcaaacaaag aaattatgcc aatcaactgt caaattttca 60
ctataatttt cctaaaaagg cgtttttccc ccaataatct cgag 104

<210> 2284

<211> 170

<212> DNA

<213> Homo sapiens

<400> 2284

gaattcggcc aaagaggcca ttcaaactct aacacaaaat gatcacaggc tggcagagac 60
acagaagcag gcaacaattt atctggggtc taatcagagt catcataact ctcataacta 120
tcttgctcct tttctccagc acttacttcg tcttcttcac catcctcgag 170

<210> 2285

<211> 116

<212> DNA

<213> Homo sapiens

<400> 2285

gaattcggcc aaagaggcca ttcaaaagct tctcagcacc atcccacttt tctgtttgt 60
ttattactct tcaacagcag ttccacctca tgctttttta ttttgcctc ctcgag 116

<210> 2286

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2286

gaattcggcc aaagaggcca ttcagtctcc ttatcatgat tttggacccc gatctctttt 60
tcctcttgtt ctttgaggct gtgggtatct tgggaggctc ctctcttct tccacaatac 120
tcgag 125

<210> 2287

<211> 194

<212> DNA

<213> Homo sapiens

<400> 2287

gaattcggcc aaagaggcca ttctgtatat cctgaacaaa gccatcttta tcatagccat 60
tagtgacaat gacttccaaa ttcttatggt ctgctgactt cttcatcatt ttcttatcat 120
tactactttg ttctgtctct ttcacttctt cttgggctc ttcttctca gactcggctc 180
cactgtcact cgag 194

<210> 2288

<211> 126

<212> DNA

<213> Homo sapiens

<400> 2288

gaattcggcc aaagaggcca ttcaagagc tattcaatgt cagttacaag cctgtcccaa 60
ttatatccct actactcacc atccccgcac ctatcactgg cattttctgt ccatatctta 120
ctcgag 126

<210> 2289

<211> 116

<212> DNA

<213> Homo sapiens

<400> 2289

gaattcggcc aaagaggcca ttctccacac tttaaatttg acttgacatt ttctaggcag 60
atataagtta ttagagaatg agattctcta taaaaatgat cccttcattt ctcgag 116

<210> 2290

<211> 312

<212> DNA

<213> Homo sapiens

<400> 2290

gaattcggcc aaagaggcca ttcaaagctt ctcaagtcag ctaagtcaga cagaactgca 60
gagatagaag tagaaggga ctcagattct tcctcagta gggtagaatc caggaacctc 120
gagtaatagc cattctgact ggtgttaggt ggtatctcgt tgtgggtttg atttatttgc 180
atttctctaa tgatcagtga tattgaggtt tttttaatag gcttgttggc tgtatgtata 240
tcgtcttttg aaaagtgtct ggctggggcg gtggctcagg cctgtaatcc cagcactttg 300
gataggctcg ag 312

<210> 2291

<211> 148
<212> DNA
<213> Homo sapiens

<400> 2291
gaattcggcc aaagaggcca ttcaaatgat gttatttctt ggttgcaacc agttgtttca 60
attttcttta ttgatccat acattttatt tcttcttggtg ttccattttg ttgtagtagt 120
gtctcttcgg gattcggtg gcctcgag 148

<210> 2292
<211> 128
<212> DNA
<213> Homo sapiens

<400> 2292
gaattcggcc aaagaggcca ttcatgcaga cttttttaac gattttgaag atctttttga 60
tgatgatgac atccagttag atgccctctg gctgcaggcg gggccaagcc cttggcacag 120
agctcgag 128

<210> 2293
<211> 100
<212> DNA
<213> Homo sapiens

<400> 2293
gaattcggcc aaagaggcca ttattcttcc aattacttta ggaaatttat tatcttttga 60
atatcagaac caaatgttac taactatccc aatcctcgag 100

<210> 2294
<211> 183
<212> DNA
<213> Homo sapiens

<400> 2294
gaattcggcc aaagaggcct agggacctag cgcagggtt ttggtaatcc ataaaatgga 60
ttctgagact ggcaggcga ggctgtctg tccccaggc acccaaggat cctgccagac 120
agcacacttt ggaggaaggt ctgcaggag cagctgagcc atttgttctt gaacgcactc 180
gag 183

<210> 2295
<211> 133
<212> DNA
<213> Homo sapiens

<400> 2295
gaattcggcc aaagaggcct agtgtatatt aggtgtctg aaattgtgca acatgttact 60
gatgctttat ttttttcta tctccttttc tctctgtagt ccatactgga tagttcctgt 120
tgccggtctc gag 133

<210> 2296
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2296
gaattcggcc aaagaggcct agtggatatc tgcaggaaact gtgtgctaaa attgaacaat 60
ttttttgaga ttatggttgc aatacttggc gtgctactcg ag 102

<210> 2297
<211> 133

<212> DNA

<213> Homo sapiens

<400> 2297

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gaattcggcc aaagaggcct agatcagata ggtaaactgc aagatagata ggatgaaact 60
tttggcctac tgtattactt acagagtttt tttgtgtgtg gtttttaaaa ctgttaaggc 120
aagaagactc gag                                     133

```

<210> 2298

<211> 147

<212> DNA

<213> Homo sapiens

<400> 2298

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gaattcggcc aaagaggcct agttgtcagt tgtctcttcg ttttgtaag gtttttaata 60
agtacgtttg gcataatgtc ttttaatggg tttgtaatat ttgtaacggc ttttagcagc 120
tataactttt cagctggtgc cctcgag                                     147

```

<210> 2299

<211> 109

<212> DNA

<213> Homo sapiens

<400> 2299

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gaattcggcc aaagaggcct acgattgaat tctagacctg cctcgagtgt gtggcaggtc 60
tagaattcaa tcggccaaag aggcctatga attctagacc tgcctcgag             109

```

<210> 2300

<211> 171

<212> DNA

<213> Homo sapiens

<400> 2300

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gaattcggcc aaagaggcct agcgacgttg acttcgaaat tgtactccct gctgttccgc 60
aggacctcca ccttcgccct caccatcatc gtgggcgtca tgttcttcga gcgcgccttc 120
gatcaaggcg cggacgctat ctacgaccac atcaacgagg agaaactcga g          171

```

<210> 2301

<211> 131

<212> DNA

<213> Homo sapiens

<400> 2301

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gaattcggcc aaagaggcct aggaggtttg aaagaaggta gtgggctcag aaacattaaa 60
agttaggcac aaaggacaag gaaaaataaa cgaaaataaa tataatgaga atatattcaa 120
caatcctcga g                                     131

```

<210> 2302

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2302

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gaattcggcc aaagaggcct aattgaattc tgcttgtcat taagataagg tgaataagtg 60
tcttaaacgt cctgtaaaac cgactcccc tttgttacat gcacattttc cattgttacc 120
tcgag                                     125

```

<210> 2303

<211> 137

<212> DNA

<213> Homo sapiens

<400> 2303

gaattcggcc aaagaggcct aaaaagaata tgtggaactg ttcactgagt gtaataattt 60
ttttatcctg tattattcaa caggctacag ttcttagcag gagagagagc gaggagtgtg 120
caggaaatgc tctcgag 137

<210> 2304

<211> 136

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (77)

<400> 2304

gaattcggcc aaagaggcct aatgaatgta taaagcgctt ttgttccaaa gatctaaaga 60
cttccacaca cactcantga tgaaattctt attttactgt ttcttttctg gtgttattgt 120
agatgccaga ctcgag 136

<210> 2305

<211> 138

<212> DNA

<213> Homo sapiens

<400> 2305

gaattcggcc aaagaggcct attgatagtg tggaccccca tggcttcac tcctaccgcc 60
tattccggga cgccacaaga tacatggatg gacaccatgt aaaggatatt tcatgtctga 120
atcgggaccc agctcgag 138

<210> 2306

<211> 194

<212> DNA

<213> Homo sapiens

<400> 2306

gaattcggcc aaagaggcct aggtgtgaca gatcaattgt caataaatca aggcagactg 60
cactggatat tgctgtattt tgggggtata agcatatagc taatttacta gctactgcta 120
aagggtgggaa gaagccttgg ttcctaacga atgaagtgga agaattgtgaa aattatttta 180
gcaaaacact cgag 194

<210> 2307

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2307

gaattcggcc aaagaggcct aaaaacttca agacattcaa aaactaggaa ggagtatgtt 60
taatagtatt tgtataaatt tgggtggttat gtttttttat tttgtttctg ttttgtgtag 120
aggtgatctc gag 133

<210> 2308

<211> 101

<212> DNA

<213> Homo sapiens

<400> 2308

gaattcggcc aaagaggcct actcagcttc tcccataggt agtttaacag gcattaaaat 60
ttgtaattga aatgttgctt tcttgaaaa agtgtctcga g 101

<210> 2309

<211> 103

<212> DNA

<213> Homo sapiens

<400> 2309

gaattcggcc aaagaggcct acttttttatt ttgtacttaa aattctggta ctgacacttc 60
acaggctaag tataaaatga agttttgtgt gcaccttctc gag 103

<210> 2310

<211> 161

<212> DNA

<213> Homo sapiens

<400> 2310

gaattcggcc aaagaggcct acagatagga atctaaatat ttatagttag attgtgaaag 60
caaccttaaa gttttgaaga agactgatga gactaggtgc tttgcttcct ttcacaggt 120
atctttctgt ggcatttgag aacagaaacc aagaactcga g 161

<210> 2311

<211> 101

<212> DNA

<213> Homo sapiens

<400> 2311

gaattcggcc aaagaggcct agattggaaa tctgtagcaa gatgctgttt aaaattacca 60
tattgttttt ttatcttata cttagctctc tggcactcga g 101

<210> 2312

<211> 150

<212> DNA

<213> Homo sapiens

<400> 2312

gaattcggcc aaagaggcct agtgctgaat gatatgtttg gggtaaatca gtttttttct 60
tatagaattt cggcgttttt gctgcaactg ccactaattt tgcatttaaa agaacaaaag 120
aggaatgtat ttttcgaagg agctctcgag 150

<210> 2313

<211> 149

<212> DNA

<213> Homo sapiens

<400> 2313

gaattcggcc aaagaggcct aagactttct gtcgtgggtc ttagtgtgtt gtcatatcat 60
tgtccaagaa atatctaact ttaattgttg ttattaatac tagctgggac attatgttgt 120
atatttatatt aatttgcatt ggactcgag 149

<210> 2314

<211> 153

<212> DNA

<213> Homo sapiens

<400> 2314

gaattcggcc aaagaggcct acttaagcat tactttttta actttgtgcc atttgggtctt 60
tactttttat ggatgttttc aaagaaacta ttttatattc aatctagttt atttagtcta 120
ctgtattttct atttcgtgga agcgggactc gag 153

<210> 2315

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2315

gaattcggcc aaagaggcct agtaacaacc agatggcttc actgaaacct gcttttgtaa 60
attacttttt tttactgttg ctggaagtgt cccacctgct gtcataata aatgcagaac 120
tcgag 125

<210> 2316

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2316

gaattcggcc aaagaggcct aagaaaaata acctaaattg tgctgtaatt aagattatta 60
aaattagaat tatacaatga cttatttttg gtggcaaatt ctcgag 106

<210> 2317

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2317

gaattcggcc aaagaggcct aaacagttgt gaagaacaag taatgaagggt gggagggatt 60
gtgttttttg ttttggggac aggggtctcac tgtgtcacc aggtgatct cgag 114

<210> 2318

<211> 107

<212> DNA

<213> Homo sapiens

<400> 2318

gaattcggcc aaagaggcct aaaacaactt acgttttcac aagccttaaa atttgaccaa 60
ataaactttt tttctgcttc atgcattttt cccagcatct tctcgag 107

<210> 2319

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2319

gaattcggcc aaagaggcct aacctgaagt aacctgatgt taaccaatct gctgtgtcta 60
ctatgctgtt tccttggtcc tgctagtgtc gctttactcg ag 102

<210> 2320

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2320

gaattcggcc aaagaggcct aaggataagt actagaaata ttcatttttt tccttcacaa 60
atctaaatgt tgcttatgaa aactcatctt agaatactcg ag 102

<210> 2321

<211> 100

<212> DNA

<213> Homo sapiens

<400> 2321

gaattcggcc aaagaggcct agcggacag tcattatata ttatttagac tcattccttc 60

ttccagtgcc cttatgatta ttttgcatg cataactcgag 100

<210> 2322
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 2322
 gaattcggcc aaagaggcct aggttttctg gacttttctc tcactctctg atctgatctt 60
 attctcctaa tgaaactggt ggtttcgaga gcccttctcg ag 102

<210> 2323
 <211> 158
 <212> DNA
 <213> Homo sapiens

<400> 2323
 gaattcggcc aaagaggcct atctgttttt tgaaatcctc ttttttacat tgtttaaaga 60
 taatgccttg gctaaaaagc ctgcttcact tttccctggt tttagtgtt tctccacat 120
 tggcagttaa gagccttggc gtcccaggac aactcgag 158

<210> 2324
 <211> 151
 <212> DNA
 <213> Homo sapiens

<400> 2324
 gaattcggcc aaagaggcct agttaatttt tctaatttta ccaaagtttg cagcctatac 60
 ctcaataaaa cagggatatt ttaaatcaca tacctgcaga caaactggag caatgttatt 120
 tttaaagggc atactggagg ttctccctat a 151

<210> 2325
 <211> 127
 <212> DNA
 <213> Homo sapiens

<400> 2325
 gaattcggcc aaagaggcct atattactgg tattagtctt agcctaatac acctaattat 60
 ttttctttct gtattctttt cttctcctaa tagcatctgc agcaattgga atgagaaatc 120
 cctcgag 127

<210> 2326
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 2326
 gaattcggcc aaagaggcct acaacactgt gaggtttctg taataatttag cttttatttg 60
 gaagcgatag cgtatggcat tttttatgct gtttggttta tattgtctac tgcaggcttc 120
 tttgtataag ctttgcctgg gctcaccctc tcctggacac tgttttaaag tgtcaccgct 180
 gtccatgcga ctcgag 196

<210> 2327
 <211> 109
 <212> DNA
 <213> Homo sapiens

<400> 2327
 gaattcggcc aaagaggcct cggaaggcag gcacacgaag acacagggtat gtcgggaagt 60
 gcacacaaac cgttgccttt cctttttggt taaagaagaa aaactcgag 109

<210> 2328
 <211> 126
 <212> DNA
 <213> Homo sapiens

<400> 2328
 gaattcggcc aaagaggcct aatgtttatg tcaactaactc atctgaaagt acttgtctta 60
 aaagttttta tttttattcc agtgtttgtg gattttttcc aaaaaccta gaaaaccaa 120
 ctcgag 126

<210> 2329
 <211> 265
 <212> DNA
 <213> Homo sapiens

<400> 2329
 gaattcggcc aaagaggcct aatagaaggc cgctgactga gccaccagtc agaactgac 60
 ctggacagc cacaaccac caaggattgc cagctgtgga ttcagagata ctggagatgc 120
 cacctgaaaa agcagatgga gtatggagg ggatagatgt aaatggacca aaagcacagc 180
 tgatgttgcg gtatccagat ggaaaaagg aacagatcac tttccagag caagctaac 240
 tgctagcttt ggagaagcac tcgag 265

<210> 2330
 <211> 164
 <212> DNA
 <213> Homo sapiens

<400> 2330
 gaattcggcc aaagaggcct actaataagc caaggaatcg acatatatta ggtgcgtgta 60
 ctgtttctaa aaaccacaaa ctaagaatga taaattatca atatagtta gtatttgcta 120
 atttactac actcttttgt tatgtatatg taggaagtct cgag 164

<210> 2331
 <211> 129
 <212> DNA
 <213> Homo sapiens

<400> 2331
 gaattcggcc aaagaggcct aaaaaaaca aaaaaaaca gaaaaaaaag aaagaaataa 60
 taggaaaaaa taataatttc tcctaatatg attatttatt atagaatttt atgtctccat 120
 gtactcgag 129

<210> 2332
 <211> 104
 <212> DNA
 <213> Homo sapiens

<400> 2332
 gaattcggcc aaagaggcct atataatccc aagatcagtg ttatatTTTA ctggagaagc 60
 tattgaagat gatgatgatg attatgatga agaaagctct cgag 104

<210> 2333
 <211> 170
 <212> DNA
 <213> Homo sapiens

<400> 2333
 gaattcggcc aaagaggcct actcagttac cttctaacta ataggctggt tcaggagact 60
 ctcccagttt ataaatggtt ctcttgggag cctttggaag ctgtattaaa tctttcagtc 120
 ttttatttct aattttttct cttaatctaa atagaggcca gtgtctcgag 170

<210> 2334

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2334

gaattcggcc aaagaggcct agctgttatt gtgatgagtc ttgggtttta catcacagta 60
ttctgtgatg tctttttaac tttttggaaa gaggaactcg ag 102

<210> 2335

<211> 125

<212> DNA

<213> Homo sapiens

<400> 2335

gaattcggcc aaagaggcct acttaaacat aagcgaaacc agtagcaagt atgtgggtca 60
gcttaaaaaat ttgtattgtt aatgccctat tttctaattt ggcacctctt gatgccgaac 120
tcgag 125

<210> 2336

<211> 416

<212> DNA

<213> Homo sapiens

<400> 2336

gaattcggcc aaagaggcct atccagattc aaatgcagaa actgtgatga ctttgatttt 60
tgtgaaacgt gtttcaagat aggcctcttt ggccgaattc ggccaaagag gcctactctt 120
tactcacct cactcagcct aaccttgctt ccgattttat taaggaaatc caatcaatca 180
gaagagggtt ctacaattta ctatcacatt taccaccag ccatcacctc tgccatatat 240
gctcctctcc tattccaatg gctggaatgt ctcagggaag accaagccct tcacttgtag 300
attagatccc agctctctgt cccatccatt atggaagctg cacatcacc cagtcacaca 360
agagggcact ctgaatgagg aatcttgtta actactccaa atcaccgctt ctcgag 416

<210> 2337

<211> 112

<212> DNA

<213> Homo sapiens

<400> 2337

gaattcggcc aaagaggcct aaatgagcat gataatttta caaaaaatct tgaaaatctc 60
atgtctacca ttcaagagag ttactgttcc aactggcgat gcccaactcg ag 112

<210> 2338

<211> 127

<212> DNA

<213> Homo sapiens

<400> 2338

gaattcggcc aaagaggcct aaaagacaat gaagccttta ttgagccact acattaaaag 60
tatatatgct tttactgcct tcaataccag tattacatca atgcatgtat cagaaacttc 120
actcgag 127

<210> 2339

<211> 187

<212> DNA

<213> Homo sapiens

<400> 2339

gaattcggcc aaagaggcct atctaaatct gcattataat agctctaaaa ttgttgatt 60
ggtaagaaat tgggcattgc ttggctcttt aaacacatca gtgcttcac attcacctat 120

gtatttatta ttcaaaagtg tcattttaat atttattgct accttctgtg aatgctcagc 180
tctcgag 187

<210> 2340
<211> 191
<212> DNA
<213> Homo sapiens

<400> 2340
gaattcggcc aaagaggcct aggaagagtt cactcatggt tgcacccgcg gtgatgcgtg 60
cttttcgcaa gaacaagact ctccgctatg gagtcccat gttgttgcgt attgttgag 120
gttcttttgg tcttcgtgag ttttctcaaa tccgatatga tgctgtgaag agtaaaatgg 180
atactctcga g 191

<210> 2341
<211> 111
<212> DNA
<213> Homo sapiens

<400> 2341
gaattcggcc aaagaggcct aatgaaattt acagtgatag aacaaaagag gattagtaga 60
aaatacatta ttagaatata aaaaatggtt ttactgagga aatatctcga g 111

<210> 2342
<211> 103
<212> DNA
<213> Homo sapiens

<400> 2342
gaattcggcc aaagaggcct agtaaaacat tggctcaaaa taaagtacac actgatttat 60
tttactgttt gaaatgtttt cttttaaact gatgctcctc gag 103

<210> 2343
<211> 162
<212> DNA
<213> Homo sapiens

<400> 2343
gaattcggcc aaagaggcct ataaatcatg aacataaaaa taattttcaa agtatgctta 60
attgttcggt tttttaattc agcagaattt ttctcctctg ctaatgacaa ggcagtctat 120
attagagact gtcaaaatta tttcttaaga agcaccctcg ag 162

<210> 2344
<211> 169
<212> DNA
<213> Homo sapiens

<400> 2344
gaattcggcc aaagaggcct agaggaaccc aaagatgaag atttcagccc tgacgggggt 60
tatattccac gaatcctttt tctggatccc agtggcaagg tgcattcctga aatcatcaat 120
gagaatggaa accccagcta caagtatttt tatgtcagtg cccctcgag 169

<210> 2345
<211> 131
<212> DNA
<213> Homo sapiens

<400> 2345
gaattcggcc aagaggccta gaaaagaatc aaagattttt tgtgctcttc actatgtata 60
tagctctgtc ttcagtccat gctctgatcc tttgtggatt tcagttcctc tctgtgtcc 120

gagcactcga g

131

<210> 2346

<211> 275

<212> DNA

<213> Homo sapiens

<400> 2346

gaattcggcc aaagaggcct aaaagaggcc tataggcctc ttgggccgaa ttcggccaaa 60
gaggcctatt tggttttgtg aatgaagaat gaaaatttta ttcccattaa gtgcgagctt 120
caattgaggc actcagttta tgaggcttta ctgatgttcc ctctcttagg tgctgtagtt 180
aaaatcttgc tgggtctaaa tggtgaaaac tattgaggta ttcaaatgat aagtacttta 240
taaactgaaa ttgcattgaa aacggagtac tcgag 275

<210> 2347

<211> 119

<212> DNA

<213> Homo sapiens

<400> 2347

gaattcggcc aaagaggcct attttttatt ttttttcttt ttttttgttt aagctatata 60
aaaagggtgag gaagcagttt tgttacctaa tgaaaattat tacactcata atactcgag 119

<210> 2348

<211> 181

<212> DNA

<213> Homo sapiens

<400> 2348

gaattcggcc aaagaggcct aaatggacac aaatatttct tggattatgt gtctgcgcat 60
attttatttt tgctgcacaa cactcgagat aggtgggtgg ggaaacaaaa cacacagtct 120
ctggcaagcc ccaccgggaa aggagggtc agaaggcgta gcgggtccgg ataccctcga 180
g 181

<210> 2349

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2349

gaattcggcc aaagaggcct acaggcatat tttttattac tgcccagtaa acatatatac 60
taaagggttta atgaagctgt gcccttacta tatgcactca ctcgag 106

<210> 2350

<211> 233

<212> DNA

<213> Homo sapiens

<400> 2350

gaattcggcc aaagaggcct actaaaaaaa aacttttctt cacacaaact tgacttctct 60
tagaaggctt atttctttct tgagcatata ttttaggact atttacattt attatcttct 120
cttccatgtc ctcagtgtca agtacttcac tttctggagt taattcagcc cagttttcac 180
ctatagcatg tttattaacc attttcatat acttaaaagc ccagcagctc gag 233

<210> 2351

<211> 114

<212> DNA

<213> Homo sapiens

<400> 2351

gaattcggcc aaagaggcct attcaaagct aaaatataaa actatttggg aagratgaaa 60
cgatgtctcg tgatctggtg tacccttate cctgtgacgt ttggccatct cgag 114

<210> 2352
<211> 168
<212> DNA
<213> Homo sapiens

<400> 2352
gaattcggcc aaagaggcct attgagccac aaagtgttga ttcttgcgat gtatgtgcct 60
tattttatgt taatcttgtc aatgagaggg accagttggt gttgccaat cagcactcca 120
aggctgtgtg tgcaccagcc agagagcgca cgggtggcac tactcgag 168

<210> 2353
<211> 134
<212> DNA
<213> Homo sapiens

<400> 2353
gaattcggcc aaagaggcct actaaagtat taaaagtaca gaggaaaaac taagcaagca 60
tttatagcaa taccatgaaa tctccagtaa tcgttttgac tggtgccttt tgctctttag 120
tgcaaccact cgag 134

<210> 2354
<211> 163
<212> DNA
<213> Homo sapiens

<400> 2354
gaattcggcc aaagaggcct agcaaattac aggttaactta aaatctacca tcttaaccca 60
tatttaactg tactgttcag tagtgtaag tcattcgcat tgggtcfaat taatatccag 120
aagttttttc aacttaatga aactaaaaa ttataccctc gag 163

<210> 2355
<211> 117
<212> DNA
<213> Homo sapiens

<400> 2355
gaattcggcc aaagaggcct agataaattg gcctacataa aaataagaaa tcttacattc 60
agacttgggg ctttctactta tcataagatg aaaactaatt ttcattgttt cctcgag 117

<210> 2356
<211> 224
<212> DNA
<213> Homo sapiens

<400> 2356
gaattcggcc aaagaggcct atgatgccgt cccgtaccaa cctgggtact ggaatcccca 60
gtagttaaagt gaaatattca aggtctctcca gcacagacga tggctacatt gaccttcagt 120
ttaagaaaac ccctccaaag atcccttata aggccatcgc gcttgccact gtgctgtttt 180
tgattggcgc ctttctcatt attataggcc cccacccact cgag 224

<210> 2357
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2357
gaattcggcc aaagaggcct acttgaaatg aggattttat ctctgagtat tttttgtagt 60

attcccccttg tccagttttt gcagaagaat ggctcaagcc tcgag 105

<210> 2358

<211> 129

<212> DNA

<213> Homo sapiens

<400> 2358

gaattcggcc aaagaggcct aattcgtata atgaagctga tttatctata cttccaacat 60

tttcagtatt tggctgttat agatatgctt gtgtacaaat gttttggaaa actgatgaca 120

gatctcgag 129

<210> 2359

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2359

gaattcggcc aaagaggcct aggtgaactg gttaaataaa tcatactaga ttcagaaaaat 60

acatactaca aaaacagaat gaaatggatg acctgcctcg ag 102

<210> 2360

<211> 129

<212> DNA

<213> Homo sapiens

<400> 2360

gaattcggcc aaagaggcct aattttgaga tactaaggat tatcttttga catgtactgc 60

agcttcttgt ctctgttttg gattactgga ataccatgg gccctctcaa gagtgtctgga 120

caactcgag 129

<210> 2361

<211> 145

<212> DNA

<213> Homo sapiens

<400> 2361

gaattcggcc aaagaggcct agttgtttac tttctaacag tcgataaaat ttagcctttt 60

taaattatag tattaccatt atttgatttg ttattgcaca ttctgtgccca tgaagctttt 120

taacatttgc aacagaaccc tcgag 145

<210> 2362

<211> 135

<212> DNA

<213> Homo sapiens

<400> 2362

gaattcggcc aaagaggcct actgttcaac ttgaaaatga gctggagaat tttactaagc 60

agtttctacc ttcaagcaat gaagaatcct aacaatagag attgcttttg tgaccatgat 120

aggaggtcac tcgag 135

<210> 2363

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2363

gaattcggcc aaagaggcct agaggggggg aataaaagtt ttaaaaatgt tatggtacct 60

ctgcatgttg ctggaggttt gtggaacggg ggtctacggg gtgaaatata cacagagctc 120

tttagcctgc ctcgag 136

<210> 2364

<211> 116

<212> DNA

<213> Homo sapiens

<400> 2364

gaattcggcc aaagaggcct agaaagaata cttaaaaagt taaatattcc ttaatttcaa 60
gtttatgaac acaaatacat taaactagaa tgcatttttag aaataaacta ctcgag 116

<210> 2365

<211> 155

<212> DNA

<213> Homo sapiens

<400> 2365

gaattcggcc aaagaggcct agtcttctag aagaagaata gcacagagaa atatacgcta 60
tgaagaaact attatttcag atgtgcatac acctgagcga actatggact agacaggctc 120
tcttggtcac attaccttat caagagtctc tcgag 155

<210> 2366

<211> 100

<212> DNA

<213> Homo sapiens

<400> 2366

gaattcggcc aaagaggcct aatttagata gttgtttagt tctcttttc tttgtagaac 60
atagatataa ggcattggtt cattgaagtc agtactcgag 100

<210> 2367

<211> 108

<212> DNA

<213> Homo sapiens

<400> 2367

gaattcggcc aaagaggcct agctatgata tcaattgact tcctggggtt attcttcttt 60
atggcaggaa gatgtatttg tacaccagac tgccataaag gcctcgag 108

<210> 2368

<211> 131

<212> DNA

<213> Homo sapiens

<400> 2368

gaattcggcc aaagaggcct aatttccctt taaaataact atttatttta aaataactat 60
tggcaataag gaaactgttc aaagtagagg cagatcttga tagaaagatg ttaatcacag 120
gctttctcga g 131

<210> 2369

<211> 169

<212> DNA

<213> Homo sapiens

<400> 2369

gaattcggcc aaagaggcct agattgattt cttcttcatg gtgttttttc aaagctgcc 60
gttggtctct actctgtgct cggaatatc gttcctcttc agcctgctct ctctttccga 120
aggccccacc ggcttcccg atggagcccg cgccccggtc atctctcgag 169

<210> 2370

<211> 118

<212> DNA

<213> Homo sapiens

<400> 2370

gaattcggcc aaagaggcct actttgagga aagcagtggg attttgcttt ttgttttgga 60
agccatgttg tgtggtctgt ggacctgctt gctttttttg aatgtgagtc agctcgag 118

<210> 2371

<211> 107

<212> DNA

<213> Homo sapiens

<400> 2371

gaattcggcc aaagaggcct agctctccag tagaatttta gttgaattaa atcataagag 60
aaacaatgat tattgcacat attatacttg tcacactaca tctcgag 107

<210> 2372

<211> 136

<212> DNA

<213> Homo sapiens

<400> 2372

gaattcggcc aaagaggcct acttaagaag gaattaaaaa aaaaaagctt tgccaatagc 60
taaaaagtac aagctattaa aaatcagatt gaaaagtttt gagaaaatgt tatttttact 120
gaaagcaacc ctcgag 136

<210> 2373

<211> 104

<212> DNA

<213> Homo sapiens

<400> 2373

gaattcggcc aaaagaggcc tacagttaca ttcgaattta gacgggtata ggattttggt 60
ttttcaagat gaaaaaactt atagtgtgga gggttgcact cgag 104

<210> 2374

<211> 117

<212> DNA

<213> Homo sapiens

<400> 2374

gaattcggcc aaagaggcct atacttctgg gactggaata taaaaaagaa tcaaagggtc 60
tgattttgag ttgcaataaa gggaaagacc atgctcatag cagtgcgaat actcgag 117

<210> 2375

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2375

gaattcggcc aaagaggcct acaataaaga gatgcgtgtg actagttttg gacttttaac 60
cttaaatgggg gttgcatgtc tcctattgtt aatcattgtc agctgcagtg acatgatcca 120
cagtcctctc gag 133

<210> 2376

<211> 529

<212> DNA

<213> Homo sapiens

<400> 2376

gaattcggcc aaagaggcct aatggcgggtg gcaaattcaa gtcctgttaa ccccggtgtg 60

```

ttctttgatg tcagcattgg cggtcaggaa gttggccgca tgaagatcga gctctttgca 120
gacgtttgtgc ctaagacggc cgagaacttt aggcagttct gcaccggaga attcaggaaa 180
gatgggggttc caataggata caaaggaagc accttccaca gggtcataaa ggatttcattg 240
attcaggggtg gagattttgt taatggagat ggtactggag tcgccagtat ttaccggggg 300
ccatttgcag atgaaaattt taaacttaga cactcagctc caggcctgct ttccatggcg 360
aacagtggtc caagtacaaa tggctgtcag ttctttatca cctgctctaa gtgcgattgg 420
ctggatggga agcatgtggt gtttgaaaa atcatcgatg gacttctagt gatgagaaag 480
attgagaatg ttcccacagg cccaacaat aagcccaagc aatctcgag 529

```

<210> 2377

<211> 106

<212> DNA

<213> Homo sapiens

<400> 2377

```

gaattcggcc aaagaggcct acatcatttg aacttatttt attgatactc attagtgaat 60
aaaattgtgt tgatttttga tgcattacaa cacactttta ctcgag 106

```

<210> 2378

<211> 112

<212> DNA

<213> Homo sapiens

<400> 2378

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gaattcggcc aaagaggcct acgatttcta ttcttgaaag aatcaactac agtgaatcct 60
ttgcatttga agccttaaca tgcattgctt taattttgcc cagggtgctcg ag 112

```

<210> 2379

<211> 103

<212> DNA

<213> Homo sapiens

<400> 2379

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gaattcggcc aaagaggcct atataattaa aaatttacta atgcaaacaa gatttacagt 60
ctttaatata atcttaattt tggaattcat gaaggaactc gag 103

```

<210> 2380

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2380

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gaattcggcc aaagaggcct aaacaaaat atgttgtggc tgggtgccagt atttttgtta 60
atgaaatggt cagtgtctca ctacagtctg atcgaactcg ag 102

```

<210> 2381

<211> 105

<212> DNA

<213> Homo sapiens

<400> 2381

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gaattcggcc aaagaggcct actgctgttt aaagttaaca tttgaatgaa acactttttt 60
actaaagtat tagaaatagg agtgcaggta aaggcaattc tcgag 105

```

<210> 2382

<211> 118

<212> DNA

<213> Homo sapiens

<400> 2382

gaattcggcc aaagaggcct agttaatgag gccaatTTTT ccagcattta taattatttt 60
 ttccacttgt taggaagcct ttgttatgta ttttctgtta atagtaccgc ttctcgag 118

<210> 2383
 <211> 116
 <212> DNA
 <213> Homo sapiens

<400> 2383
 gaattcggcc aaagaggcct aagatgatgg tgatgatttt gttcgggggc tcatttggat 60
 ttcttaccga ctgcaccatc caaagcagca gcataaactc agagatgac ctcgag 116

<210> 2384
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 2384
 gaattcggcc aaagaggcct agactacttg ttctgtgccc ctcttgTTTT aggcctcggt 60
 tacttttaaa aaatgaaatt gttcattgct gggatactcg ag 102

<210> 2385
 <211> 109
 <212> DNA
 <213> Homo sapiens

<400> 2385
 gaattcggcc aaagaggcct attgtgattt aactagttag aattgtattc aagtgaactc 60
 tgtttttctg aaaataaaaa tataaacaat gagattggca ctactcgag 109

<210> 2386
 <211> 148
 <212> DNA
 <213> Homo sapiens

<400> 2386
 gaattcggcc aaagaggcct agatgtctcc cttgactctt ctgtgtatat gtgtgaatat 60
 gtgtgtatat gtgtgtgtgt gtgtgtgtat gaagctggct ttatcagaat tactgggtga 120
 tggatatgaa gaaagaaagg ctctcgag 148

<210> 2387
 <211> 113
 <212> DNA
 <213> Homo sapiens

<400> 2387
 gaattcggcc aaagaggcct atgaaaatga ttctgctccc ttgaaagca ttcatttttc 60
 tagaactgtt agacacattg cagtatgctg tattgaaagt agaaatactc gag 113

<210> 2388
 <211> 189
 <212> DNA
 <213> Homo sapiens

<400> 2388
 gaattcggcc aaagaggcct aatggagacc aagctgaagc cactgagaaa atgggagaag 60
 ttgcagatga cgtccagcga gcgcaggaag atcatgtgct cagtacatt ccacgtcatt 120
 gccatcacat gtgtgggtctg gtccttgat gtgctcattg accgtactgc tgaggagaag 180
 gggctcgag 189

<210> 2389

<211> 158

<212> DNA

<213> Homo sapiens

<400> 2389

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gaattcggcc aaagaggcct aatttccttt tattgctgcg aaacagcaag ttaagacaaa 60
ttacagttaa atattagtta aaggtcacat gatgtgccac ataaacattt tgggcactat 120
gtaactttta aacttggtct attacatgcg ggctcgag 158
```

<210> 2390

<211> 129

<212> DNA

<213> Homo sapiens

<400> 2390

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gaattcggcc aaagaggcct aaattaatct atgaatctcc tagaatgctg tctggcaatg 60
tgtttggttt ttctctgttt ggcaaagggtg tgtttttggt ttttagattc cagtgaacca 120
atactcgag 129
```

<210> 2391

<211> 206

<212> DNA

<213> Homo sapiens

<400> 2391

```
gaattcggcc aaagaggcct agaaacattt ttgcctggat gagttccttg ttggttaactc 60
tcaactgtgtc tctagtgaac ctagagatct cttagcgttca cctgacttgg ctgaattggt 120
gggtgccaggc agagtccctg gcagtagagc cacctcagat gagcctggta gctgcaccta 180
cctcccccttc aactaacaag ctcgag 206
```

<210> 2392

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2392

```
gaattcggcc aaagaggcct aaatgtttta tattttataa atcatctttt gactctgtat 60
ttaaattcta tgatactgaa aataaaggca ttcacccctg ag 102
```

<210> 2393

<211> 133

<212> DNA

<213> Homo sapiens

<400> 2393

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gaattcggcc aaagaggcct acgagatgaa gtctttgaat acattatatt ccgtgggagt 60
gacattaaag accttactgt ttgtgagcca ccaaaaccac agtgttcttt gcctcaagac 120
ccagcaactc gag 133
```

<210> 2394

<211> 122

<212> DNA

<213> Homo sapiens

<400> 2394

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gaattcggcc aaagaggcct aggagtgggg gtgaggtaaa atgggaaatt ggatatgaaa 60
gaaatacaca cctacatgga aatgtttcaa cgtgcgcaag cgttgcgaca gcgggactcg 120
ag 122
```

<210> 2395
<211> 109
<212> DNA
<213> Homo sapiens

<400> 2395
gaattcggcc aaagaggcct atggaagtcc agaaaggaaa ataatttaaa ttaatgctgg 60
tgatcttaac aatattttgt aaaatgatgc ttcccccttc gccctcgag 109

<210> 2396
<211> 135
<212> DNA
<213> Homo sapiens

<400> 2396
gaattcggcc aaagaggcct agaaaatgaa atgaaattga agaataattt gcattatcta 60
gtcttatcac tgccattcta tgacacagga aataccattt gggaaactga gtttctattt 120
gaaaaaggac tcgag 135

<210> 2397
<211> 102
<212> DNA
<213> Homo sapiens

<400> 2397
gaattcggcc aaagaggcct agtctgtttg aagataagag gaaaagtaga acttaaaaact 60
ccaaactaga gtacgtaaca ttgaaaaatg aggctgctcg ag 102

<210> 2398
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2398
gaattcggcc aaagaggcct attaaaatat agtaacatcc atttttttcc cttgaaagtg 60
attctcttat aaaaaatgaa agtggagttt aaggtatatc tcgag 105

<210> 2399
<211> 163
<212> DNA
<213> Homo sapiens

<400> 2399
gaattcggcc aaagaggcct aaaaaactat gcatgttcta ttgttttccct ttttgattcc 60
ctttctttta ttatccccag taggagtgcac ttgtaattct catatgtag aaaggcaggt 120
ctcctgggtg aagaaaagat ccaccaagc aagtcagctc gag 163

<210> 2400
<211> 99
<212> DNA
<213> Homo sapiens

<400> 2400
gaattcggcc aaagaggcct aagcatcagt ttgttggttt taaaaggata ttttaagtga 60
cattttctag ttcatatgaa aataaccata gtactcgag 99

<210> 2401
<211> 152
<212> DNA
<213> Homo sapiens

<400> 2401
gaattcggcc aaagaggcct atattgaaca tgttcttcaa gtatacatgg aataactttt 60
tgcatacaca agtggaaatt tgtattgcac tgattcttgc aagtcctttt gaaaacacag 120
aaaatgccac aattaccgat ccaagactcg ag 152

<210> 2402
<211> 167
<212> DNA
<213> Homo sapiens

<400> 2402
gaattcggcc aaagaggcct actctaactt ccgtaaggac acggatgctt aattacaaaa 60
ggttttgccc ctgtagtgac cgggcagcaa tgttatctgt ccttcattct tgcattgttt 120
tggaaattgc ttttgctttt acttttggtc gtcaaggcaa tctcgag 167

<210> 2403
<211> 162
<212> DNA
<213> Homo sapiens

<400> 2403
gaattcggcc aaagaggcct agaaaaatat ttagttgtct cattacctct tctaaacaca 60
aaccagctga tgtattttta tctgtttctg ttctatcttg taattaattt ggtgggttct 120
acttgtttta acataaataa agagtatgca ccacgtctcg ag 162

<210> 2404
<211> 103
<212> DNA
<213> Homo sapiens

<400> 2404
gaattcggcc aaagaggcct agcaaaatat cttccaaaca gcagaaaata acatacttct 60
gggaatgaaa ctacagtgtg ttcatatgac ccatatactc gag 103

<210> 2405
<211> 125
<212> DNA
<213> Homo sapiens

<400> 2405
gaattcggcc aaagaggcct aagagaatgg ccatgattcc agtagttaat gatcttctag 60
gttttttggt tgtttgtttt tgtttttttt ttgagacgga gtctcagggtg acccaccctc 120
tcgag 125

<210> 2406
<211> 113
<212> DNA
<213> Homo sapiens

<400> 2406
gaattcggcc aaagaggcct actcatactt gaaagtttga ctcggtcttt tccttccaac 60
agttataaat ctgtgaaatg aaagtctttg tttccttaaa gggatttctc gag 113

<210> 2407
<211> 207
<212> DNA
<213> Homo sapiens

<400> 2407
gaattcggcc aaagaggcct agcaaaagtc ctgtgtgttt tttgtaattt tgtctgtggt 60

ctgatctctc ttcaccagac aaaagaaaag tacacaatct ctaaaatggt ccatttttta 120
ttgatgagta ttatactgc cttctgcctt cttctctttc ctcctattt aaaaactttt 180
ccgtttgtaa aaaccacaac actcgag 207

<210> 2408
<211> 105
<212> DNA
<213> Homo sapiens

<400> 2408
gaattcggcc aaagaggcct acaaagcact tgaaagaaga aactattcaa ataattacca 60
aggcatcaca tgagcatgaa gataaaagtc ctgaaactac tcgag 105

<210> 2409
<211> 194
<212> DNA
<213> Homo sapiens

<400> 2409
gaattcggcc aaaaggccta taccaaatag cgaattagcc atgggaaaaa gtagcaaata 60
aataattatt ttactttttc agatgctaatt tttctctttc gtttatttta ggattgggtg 120
gagctgtcca atgtccttag gctgttttcc aaatgagata ccaaagcta gttctccatc 180
gggtgccgct cgag 194

<210> 2410
<211> 114
<212> DNA
<213> Homo sapiens

<400> 2410
gaattcggcc aaagaggcct agagtatttt ctatatattg aagctgttag atgcatagtc 60
atgatttttg gtggaatggt ttatcaattt ttgaaaattg ctttgcgct cgag 114

<210> 2411
<211> 268
<212> DNA
<213> Homo sapiens

<400> 2411
gaattcggcc aaagaggcct aagaagtgtt tatagaaaag atggctaata ttaacctaaa 60
agaaataacc ttaatagtag gtgtggttac tgctgtctat tggaacagcc tcttttgttg 120
ttttgttttt gatgatgttt cagcaatact ggataacaaa gacttgcac catctacacc 180
tttaaaaact ttatttcaaa atgacttctg gggaaccct atgtctgagg agagaagcca 240
caagtcttac cgtccccacc acctcgag 268

<210> 2412
<211> 126
<212> DNA
<213> Homo sapiens

<400> 2412
gaattcggcc aaagaggcct aggaaaatgt tggggcgctt gagccgcctt tgcagtcgga 60
ggggcagcct aggaggagcc caggggaggc gtggcttctc tccaggtaca tagaaggccg 120
ctcgag 126

<210> 2413
<211> 260
<212> DNA
<213> Homo sapiens

<400> 2413

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gaattcggcc aaagaggcct acgaggatct tggtttgaca aactagcaat ttccaaacgt 60
tcctgcttag ccatttcttt cctttttttt tcttctttta tcttctttt ccttctctga 120
atctcatgca ggatttcacg ttgctcctgc tcttctttcc gcttggcctc caacagcgcc 180
tcgagaagtg gggaaactca acggtgtacg agtggaggac agggacagag cctctctgtg 240
tggaacgacc ccacctcgag                                     260

```

<210> 2414

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2414

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gaattcggcc aaagaggcct agttaaatga atccagattg ctgagagggc acggcaaggt 60
cgccctaaggc ctttattcat gaagcaaate tatctgcaag aatataagagc aaagcaatcc 120
aagatgcttg gcaagaaggt gacagatacc tgggctgctg cactccgcat tcagaaggtt 180
tggcgacgtt tccatcaacg taaggaaact gaaaaactga gagaagagga gatgatcttc 240
ctgggtatga atccacctcc tctctttaat gaagtcagtg ctacagtaat ccaggctgaa 300
aagggtggacc gcctgcggaa tgaggtgcag ataaagcatg aagaggacta cagggaagcc 360
ctggttacca tcaagaatga cctaaagttg atagaaggcg tggatatcaa ggagaacctt 420
caagaccaga tccggcattg gttcatcgaa tgcagaaatt taaccgggac atttctctgac 480
taccctgacg ttgaagaagg aggggtcagct attatttttt ctgacaagac catacaacag 540
gttattgagg atatcatagc aaaccaagag gaagaagaaa aaaaacaaaa agaagaagaa 600
gaaaaaggaa aaacaaccca agaaagccaa aaaacaaaag aaaggaacaa aggagtactc 660
gag                                                         663

```

<210> 2415

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2415

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gaattcggcc aaagaggcct aatcgcttgc acctgggaga tggagattgc gattgcagtg 60
agccgagatt atgccactgc actccagcct tggcgacaga gtgagactct gtctcaaaga 120
aaaaaaaaaa aagagtccta tcttgcgaaa cagagcaagg tcatggctcc agtggcagaa 180
gaaaggacgg tcagtggcag gaaataggtg tgaacggaac agtcaccagg gcaaccagac 240
acccccaggg aaatggcagg tgcagcttta tttccgcat tatggagaga gggaaaaaaa 300
gtgtcagctc cttattaggg agagtaatta catcctttat aactgtgtac ctaattagtt 360
tgtttctaac catcctcatc atgaacaaac acattaaata attggagaga agaggagata 420
agaaagagaa ttaacatttg agaagagact accatgtgtc agacaagcac tgtgctcggc 480
atccttctgt atgttagctc tctaaccctc actaaaacaa acacacaaac caaagatgat 540
tcagtagttg atattttatc agctacatct cccagtgcac tcgag                                     585

```

<210> 2416

<211> 799

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (770)

<400> 2416

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gaattcggcc aaagaggcct aaaatgattt caaataactt ttaatcaatt aaaccaataa 60
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gtgatttcac ttgaagaaag ggtctcaaag agtttgaaaa ccattgattg attatgccac 300
cctttattgt catcatcatc atcagacatc cacaatctat acgaatata gtataaactt 360
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aatcagtaaa cacttaaaag tgtatctgta cctttctgcc aatatttctg tagttttgta 480
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catgggctaa atacaatttt taaagctatc tcaaaatggt ttggaaaatt tgagggttaag 600
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tgtaacatga aagaaggcaa tgtctggaaa aattcaaaaa tagcaattta gcggaaatag 720
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<210> 2417

<211> 237

<212> DNA

<213> Homo sapiens

<400> 2417

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gtaacagggg atcttgcagc agaaatcaga cttcaggcta tacatttga ggtcttcac 180
acgtaggtag tatTTaaagt taggagtgtg agcaagatga ggagggggag tctcgag 237

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<210> 2418

<211> 480

<212> DNA

<213> Homo sapiens

<400> 2418

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gcatgacaga gatttactat cagttcaaaa aagacaaagc agaacgtaga ttagcttata 180
atgaagaaca aatccacaaa tttgataaag aaaaactgta ttaccatgcc acaaaagcta 240
tgacgcactt tacagatgaa tgtgttaaaa agtatgaggc atttttgaat aagtcagaag 300
aatggataag aaagatgctt catcttagga aacagttatt atcgtgact aatcagtgtt 360
ttgatattga agaagaagta tcaaaatata aagaatatac taatgagtta caagaaactc 420
tgcttcagaa aatgtttaca gcttcagtg gaatcaaaca taccatgacc ccaactcgag 480

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<210> 2419

<211> 188

<212> DNA

<213> Homo sapiens

<400> 2419

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gaattcgcgg ccgcgtcgac tagacctgct ctagtctgca tcattccttc ctctaccctc 60
actctggata aattatttta ttagtttctt atatgtcttt agaaagttaa tatattctta 120
accttttttg ttttttattt ctgttttttt tagagacacg gtctcactct gttgtccagg 180
ctctcgag 188

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<210> 2420

<211> 205

<212> DNA

<213> Homo sapiens

<400> 2420

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gaattcgcgg ccgcgtcgac tgttgagttc cttatatagt ctaggtatta accccttaga 60
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ctcctttgct gtgaagaagc tttttaattt gatgcaatcc tgtttgtcta tttttgcttt 180
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<210> 2421

<211> 266

<212> DNA

<213> Homo sapiens

<400> 2421
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 ggtcccttgc aatcatgtca ttctactttt cctcactggt ggctctctta actgtgtcca 120
 ctccctcatg gtgtcagagc actgaagcat ctccaaaacg tagtgatggg acaccatttc 180
 cttggaataa aatacgactt cctgagtacg tcatcccagt tcattatgat ctcttgatcc 240
 atgcaaacct taccacgcag ctcgag 266

<210> 2422
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 2422
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 atccactcac catttatcag tcaagatgct cccccaccc aataactacc cattcacagc 180
 ttggaaccga aagctcgag 199

<210> 2423
 <211> 247
 <212> DNA
 <213> Homo sapiens

<400> 2423
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 tacttcatca cctattactt ctgaagagga atctaattctc agtaatgact ttattgatga 180
 aaatgggtctg cccatcaaca aaaatgaaaa tgtcaatgga gaatctaaaa gaaaaaccgt 240
 actcgag 247

<210> 2424
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 2424
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 acgtgctggc tcagtcctg tttttacttt caaaaaccaa caagcccgac agtggagcct 240
 gtccctctcc aggaggggtg tcatggcccc actcacctca tcacccacg gaaacctttg 300
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<210> 2425
 <211> 249
 <212> DNA
 <213> Homo sapiens

<400> 2425
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 ttctctgtgc ctactgggtt atcagtcac ccaattatttg ggcaaagtgt atacctagaa 180
 tttttgtttc acccctctgg ttctctgact gccatgtttt tccatttaa atttctagct 240
 gtctctcgag 249

<210> 2426
 <211> 195
 <212> DNA
 <213> Homo sapiens

<400> 2426
 gaattcgcgg ccgcgctcgac gttttttttt gttctaagaa agttttatcct gtattttctat 60
 ttagaagttt tagagtgtta gcttttagat taaaaaatgg tttacttttt tatttttgaga 120
 tggagtttca ctcttgttgc ccaggctgga gtgcaatggt gcagtctcgy ctcaccacaa 180
 ccttcacatc tcgag 195

<210> 2427
 <211> 175
 <212> DNA
 <213> Homo sapiens

<400> 2427
 gaattcgcgg ccgcgctcgac cctaaaccgt cgatcgtagt tcaaattgga ttgtgggtta 60
 ttggaggcag cttggctata gggttatttt gcagtgcagt ctgctgattc atcaggtcac 120
 tctgggcccc agccactgga tccagatgaa atgttctttc caggcagcgc tcgag 175

<210> 2428
 <211> 168
 <212> DNA
 <213> Homo sapiens

<400> 2428
 gaattcgcgg ccgcgctcgac taaatattag gagttaaaaa aataaaaaca atttgtcttc 60
 aacattgata cgtgttatat tctcatcatg ctagttagatg tttttaacta tgggtacaata 120
 catacgattt ttgtgttgac ttatataaca ttttaaccag gtctcgag 168

<210> 2429
 <211> 224
 <212> DNA
 <213> Homo sapiens

<400> 2429
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 gcactggaaa ccaaaaaatg tgtgtaactc actttattgc gatattcact ttattgcaat 120
 attcacttta ttgcagtgat ctggaaccaa acctgcaata tctgcatggt atgcctatat 180
 atgtatgtct agatttaact tatgaaatgc caggttctct cgag 224

<210> 2430
 <211> 315
 <212> DNA
 <213> Homo sapiens

<400> 2430
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 attctattat cccacatcc agttttatta attacttttt tctttctttc tgggtttttt 120
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 ttagtttcta atatattcctt tcagtgtttc tttctgcaaa tccaaatata tagtcttatt 240
 tccccctttc ttacacaaaa agaagcaaac tatacatgct gttttgtcgt tttgctttat 300
 tcacacaatc tcgag 315

<210> 2431
 <211> 214
 <212> DNA
 <213> Homo sapiens

<400> 2431
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 gcacactatg tgtattttatt tgccatact ctttcagctg gaagctatag aaacccaaat 120
 caaattgact tctgcaaaaa taacaaaaat caagaaattt cttggctcac aggaacctgt 180
 aaagcctgga ggaaagggtc tacaacagct cgag 214

<210> 2432
 <211> 193
 <212> DNA
 <213> Homo sapiens

<400> 2432
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 acatcccca atgcattctt accatgctgg agatcccaa gttctcagag gctcttggt 120
 tagaaacctg ggaccaagac caaatattaa aacaaaagat gttctgtca catctatcac 180
 tgagggtctc gag 193

<210> 2433
 <211> 179
 <212> DNA
 <213> Homo sapiens

<400> 2433
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 tactgctttg tattcccttt cttaccctcc tcttgatata ataccccccc atcctcgag 179

<210> 2434
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 2434
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 attataggta agaattgatt gtgttgaggt ttttgcctgt ttttatacca cttttctacc 120
 tgtgtttata gtgagagagt tggttctgct tttgttcagt ttgccacggt gctagaacca 180
 gaagtcagtt ttttttctt tgaatttgtt ttgaaaattt gtgatgcagc tcgag 235

<210> 2435
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 2435
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 gtcattcacg acgagaactg gagagaactg ctggaaggag actggatgat agaattttat 180
 gccccgtggt gccctgcttg tcaaaatctt caaccggaat gggaaagttt tgctgaatgg 240
 ggagaagatc ttgaggttaa tattgcgaaa gtagatgtca cagagcagcc aggactgagt 300
 ggacgggtta tcataactgc tcttcctact atttatcatt gtaaagatgg tgaatttagg 360
 cgctatcctc gag 373

<210> 2436
 <211> 155
 <212> DNA
 <213> Homo sapiens

<400> 2436
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 ttacttcagt aattattcca aagttctatt cattcatgct tggtttggtt tggatttttag 120
 taaggacagt cctgtgtgaa ggcgcgtacc tcgag 155

<210> 2437
 <211> 206
 <212> DNA
 <213> Homo sapiens

<400> 2437
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 ttaaaaaaac aaaaaacatt ccattagaag caccagtttt tttgctcaga ctttgtggat 180
 cagactctac actcaacaca ctcgag 206

<210> 2438
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 2438
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 tttttttatt ttgatttttt cttttttgaa acagaggctc tctctgttgc ccaggctgga 180
 gtgcagtggc atgacctcag ctcactacaa cctccgctc ccgcactcga g 231

<210> 2439
 <211> 247
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 actctttcag atattttctta aatctgtatg agtcattttt taagcttagg gatttgatat 120
 gtattaatgt cccctttgtc ttctgtagat tttagcattt tattacctct taagaaactc 180
 tgggcccaga ctttcagtca tatttcttat tcctatggta cagttctcac ttaaaggctt 240
 actcgag 247

<210> 2440
 <211> 195
 <212> DNA
 <213> Homo sapiens

<400> 2440
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 atgagctctgt atttgtgttg tttttttttt cttcgaaac catctgtaac cattgttttt 120
 atcattttat tttatttttt aagttttatt tatttttttg agacagggtc ttgctctgtt 180
 accccggctc tcgag 195

<210> 2441
 <211> 222
 <212> DNA
 <213> Homo sapiens

<400> 2441
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 aagaagaaat atacgtcccc acctcactct aattaaacct gcttttccag cgcgataaat 120
 attcaagata acttttgggtt tgcatttcaa taacaaagtc ttgcaccact atcttcagtt 180
 taaaaaaaaa gtttaatgtt tgctctacgt ttctgcctcg ag 222

<210> 2442
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 2442
 gaattcgcgg ccgcgtcgac cacagtgaag catatacata agcctataaa aaaagatttg 60
 tgcaatttga aagcctgtta attttttatg tagacatacc tacacacgaa agggttaaat 120
 tcacagcctt actagttcct tgcttcagat atttcaattg gtctcctccc ctcattatta 180

ttattactac tagtactatt atttttgcac atagttaact gcccttcaat atgattctta 240
aaaagtgcgtg tttctgtggt ctgcag 266

<210> 2443
<211> 220
<212> DNA
<213> Homo sapiens

<400> 2443
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tctgatttct gtctggtggg tctatccatt tctggccagt tgcactctta aggctggtgg 120
gttgctcggt gtcaactcag caaccctcca tttcccttct caaagcagaa agagaaacca 180
ggttctatgt ttctccagat cctttcccat atctctcgag 220

<210> 2444
<211> 265
<212> DNA
<213> Homo sapiens

<400> 2444
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agtttttaggg tacatgtatt ttccactgta ctagataaca cccaattgat ttcacagaaa 120
taatttatat atcaattttt tattaagtcc ctttgtcatg tgttacaagc tttttttttt 180
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aaaaaaaaatt gtggccagac tcgag 265

<210> 2445
<211> 130
<212> DNA
<213> Homo sapiens

<400> 2445
gaattcgcgg ccgcgtcgac ggtgtagtgt atagtataac gagaaaggag tgtttatcag 60
aattttttta catacaggta ttatacctga ggcaataatg aaatggcatc taacagctcc 120
ccttctcgag 130

<210> 2446
<211> 218
<212> DNA
<213> Homo sapiens

<400> 2446
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caggtctaaa cacaacagca gaccattaga gtagatctaa caggacaaaa gaaaatacaa 120
agagaagcaa gcccagtggg aacagaaaca aggaaaaaac accaggaatg ctgtttacct 180
tgagcttttt aaagaacttt tatttccatt tactcgag 218

<210> 2447
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2447
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cgataagcaa tctaggtcct gaattgcttc atgtgtttta atgttggtaa acattcctgt 120
aaacctgatt atccaactgt tttctatgga tttctatctg tatgtctggg ttgttttttg 180
tttatttgat tttttgagac agggctctgc tctgccgctc aggggtggagt acagtggcat 240
gatcttggct cactgcaaac tccgcctccc gggctcaagc aatccactcg ag 292

<210> 2448

<211> 155
<212> DNA
<213> Homo sapiens

<400> 2448
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aaggaataga agcattcagg taatagtaca ttcttcttgg aagcctcagg atgcaggatt 120
tgcttgacat gaagctgccc atcagtacac tcgag 155

<210> 2449
<211> 452
<212> DNA
<213> Homo sapiens

<400> 2449
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agactcctgt tttattaggg agtacggcca tggcaactag tctcacgaat gtaggaaact 120
catttagtg tccagctaatt ccttttagtgt ctagatctaa taagtttcag aactcgtcag 180
tggaagatga tgatgatgtt gtttttatcg aacctgtaca acctccccca ccttctgtac 240
cagtggtagc tgatcaaaga accataacat ttacatcatc aaaaaatgaa gaactacaag 300
gaaatgattc caaaattact ccttctctaa aagagttggc atctcagaag ggaagtgtaa 360
gtgagacaat tgtcattgat gatgaagagg acatggaaac aaatcaaggg caagagaaaa 420
attctctcaa ttttattgaa cgaaacctcg ag 452

<210> 2450
<211> 100
<212> DNA
<213> Homo sapiens

<400> 2450
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attctataag agtagatcat tatgtccccc atccctcgag 100

<210> 2451
<211> 134
<212> DNA
<213> Homo sapiens

<400> 2451
gaattcgcgg cgcgctcgac cctaaaccgt cgattgaatt cttgcctcga gtgttggtac 60
tgtatagaga gcagagtagt aatcaccaca ctgggtatcc aatggcaatg aggtcatttt 120
cccagttcct cgag 134

<210> 2452
<211> 229
<212> DNA
<213> Homo sapiens

<400> 2452
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aatgggtttac attattttct ttaagaagtc tattttttat ttatttattt ttatttattt 120
gagaccctgt ctcaataata ataataataa taatattatt ataataggtg cctatgcaca 180
gggaaccagg gaagactttg aagaggaagt acttacacgt agactcgag 229

<210> 2453
<211> 237
<212> DNA
<213> Homo sapiens

<400> 2453

gaattcgcgg cgcgctcgac tctgtatcaa ggtatcaaac aagacctaa agattgaagg 60
 tcctagtggg ggtattaaat ttttgcataa aaattaatga ccatgcaatg tttcacagcc 120
 atttttctct tcctttctaa cagccttggt agatactgta tttttgagaa tatagagaca 180
 gaaagagaag ttaataaccc attcagagtc tgggtctaaaa tccaaggctc cctcgag 237

<210> 2454

<211> 150

<212> DNA

<213> Homo sapiens

<400> 2454

gaattcgcgg cgcgctcgac ttctgcttta ttttgcttta tatgacattg atgatgtcca 60
 tctatgttgg cccatataat tcttatcaat tattttaaat gctgttttagc attgtactat 120
 ataaaaatat caaacacacg ctccctcgag 150

<210> 2455

<211> 259

<212> DNA

<213> Homo sapiens

<400> 2455

gaattcgcgg cgcgctcgac acaagaaata tcagtcattg gtttatccag accagtcttt 60
 catttccagt gttataggcc aaagcaaaca gacttcccaa catcaaatag tctcacgagc 120
 tgaaatggca ttccttgctt gtaggcatgt ggtagtaaca ctcttaggtg aaagaattgg 180
 atcaaggggtg acaatggcgg ccaggaaatg tctattatgc atgggggtgtt tccttctctt 240
 tgetgcccgc ttcctcgag 259

<210> 2456

<211> 202

<212> DNA

<213> Homo sapiens

<400> 2456

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 ttcatctctg ttcttgatt ttaaacttct aatgagctct ttttctctg aatgtttgtt 120
 gtggatatta atgattttta gaacatcttt ctcttggtg catactgttt atttggcaag 180
 ttgcttcccc caaccctcg ag 202

<210> 2457

<211> 269

<212> DNA

<213> Homo sapiens

<400> 2457

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 gtctgtaagc tagccagaga aaacagctaa ggctaagaaa ataaaatata ggagaaaatt 120
 ctagaaaatc cagatattct ggctgggggtg agagtctgta agctagccag agaaaagagc 180
 tgaggcgaag acaataaaat ataggagaaa attctagaaa aatgaaaatt ggttttattgt 240
 ccagatctg tacccttctc ccctcgag 269

<210> 2458

<211> 233

<212> DNA

<213> Homo sapiens

<400> 2458

gaattcgcgg cgcgctcgac cactgatgct gaagtactat gagccttcgg aacttgtgga 60
 gagactacaa agttttggtt gttatggccc ctttagttgg gctcatatc ttgggggtgtt 120
 acagaatcaa aagcagccct gttttccaaa tacctaaaaa cgacgacatt cctgagcaag 180
 atagtctggg actttcaaat cttcagaaga gccaaatcca gggacgactc gag 233

<210> 2459

<211> 283

<212> DNA

<213> Homo sapiens

<400> 2459

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gaattcgcgg ccgcgtcgac cctaaaccgt tgattgaagc cagtgaagtt gtgcttttcc 60
tctacttcta ctctctctcc ccgacctttt tctgcccagt gtaggtgtat tcttaaattc 120
agacagggga agattctttc acatatcact cagttacctc ccaatctggg ggagttttcc 180
ttacaacttg ataccagata ccattaattt tacattcctg aataaaggcc tagtaccac 240
gcataatttca accatgcata tatcaagttc aaccgcgctc gag 283

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<210> 2460

<211> 274

<212> DNA

<213> Homo sapiens

<400> 2460

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gaattcgcgg ccgcgtcgac tatataaggc ccaaaagtac ttaactttta aaagttagca 60
atataatctc ttcttgctta taagggtcaag tcttttgtga tagccttact agcaataata 120
gaaaattgaa aaaaagcatt ttagttcccg tgtttaaaaa tatttcttgt aagtgttggt 180
attgcaaatg aattattacc aaatgttaat aatctattat gtcttggttt ttaaagttaa 240
tgaattttta gcttttgagg gccccatct cgag 274

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<210> 2461

<211> 159

<212> DNA

<213> Homo sapiens

<400> 2461

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gaattcgcgg ccgcgtcgac ttttgtctgg gttgtcacat ttatgtgtgt agggttgtta 60
cgttatcctt ttgagtctgc agagtctatg ttgctatccc ctattttatt cccggtatta 120
ggtatttgta tcctctctct tttttgtgtt agtctcgag 159

```

<210> 2462

<211> 196

<212> DNA

<213> Homo sapiens

<400> 2462

```

gaattcgcgg ccgcgtcgac aaaagttttt aggccagtgc aaattatgca gtagaacttg 60
tgttgcaaaa ggaattataa cccatacttt aaaaatgctt aatccctcat attcaatttc 120
atcaagcctt gtatacttct gcttaaatgt aattcaatcc ttggttgta tggcaaacag 180
aaacccaacg ctcgag 196

```

<210> 2463

<211> 266

<212> DNA

<213> Homo sapiens

<400> 2463

```

gaattcgcgg ccgcgtcgac agactgcgaa ggagagttat ttctgattca aattttttat 60
ttctggattt tcccatttgg ctctttttta tagtttctgt gtattcactg aagttcccca 120
cctctccatg catgttgctc acattttcca gtaaattctt tagcattttt atcattattg 180
tgaagtcccc gtctaactta ttatctggac agtctctgag tatgtttcca ttgactgttt 240
cgtctcatgt agatcacgta ctcgag 266

```

<210> 2464

<211> 619

<212> DNA

<213> Homo sapiens

<400> 2464

```

gaattcgcgg ccgcgtcgac tgatggaact acatgaaact atggcatcct tacagagtcg 60
cctgcggaga gcagagctac agcgaatgga agcccagggt gagcgagagt tacttcaggc 120
agccaaggag aacctgacag cccagggtgga acacctgcaa gcagctgtcg tagaagccag 180
ggctcaggca agtgctgctg gcatcctgga agaagacctg agaacggctc gctcagcact 240
gaagctgaaa aatgagggaag tagagagtga gcgtgagaga gcccaggctc tgcaagagca 300
gggcgaactg aaggtggccc aagggaaggc tctgcaagag aatttggccc tctgaccca 360
gaccctagct gaaagagaag aggaggtgga gactctgctg ggacaaatcc aggaactgga 420
gaagcaacgg gaaatgcaga aggtctgttt ggaattgctg tctctggacc tgaagaagag 480
gaaccaagag gtagatctgc agcaagaaca gattcaggag ctagagaagt gtaggtctgt 540
tttagagcat ctgcccattg ccgtccagga gcgagagcag aagctgactg tgcagaggga 600
gcagatcaga gagctcgag                                     619

```

<210> 2465

<211> 202

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (44)

<400> 2465

```

gaattcgcgg ccgcgtcgac agaagtaaaa ggggtgtaag cttnttttaa atttttaaaa 60
tatgaaggaa attttttttt ttttaaaggc aggtctcat ttgttaccce ggctctggag 120
tgcagtgggt ctattacagc tcaactgcacc cttgacctgc caggctcaag tgatcctcct 180
gcctcagctc cccaccctcg ag                                     202

```

<210> 2466

<211> 263

<212> DNA

<213> Homo sapiens

<400> 2466

```

gaattcgcgg ccgcgtcgac cctaaaccgt cgattgaatt ctagacctgc ctctcagtat 60
ccccgggaag tcattattat catttgccat ctgaatccat tataccctgt ttactttcaa 120
tttttatgtt ttttactttt atattttttt ggagacagta tctcactctg ttgccagac 180
tggaatgcag tggcatgac atagctccct gcagccttga actcttgggc tcaagtaatc 240
cttccactcc agggccctc gag                                     263

```

<210> 2467

<211> 249

<212> DNA

<213> Homo sapiens

<400> 2467

```

gaattcgcgg ccgcgtcgac cgattgaatt ctagacctgc ctgcagtgt ccaacaacca 60
tcagttatgg cctatctgct tttctccttc ctgtattttt ttttcttga gacaggatct 120
cactttgtca cccatgctgg agtgacgtgg tgtgatcact gcttactgtg tcccttcaac 180
ctcccgggct caagagatcc tcccatctta gctttccaag tagctaggac tacagacgca 240
cacctcgag                                     249

```

<210> 2468

<211> 240

<212> DNA

<213> Homo sapiens

<400> 2468

gaattcgcgg ccgcgctcgac aacggactga aagacaaatt aatcttggtg aaaggatttt 60
 tcattctctta tttctattttg ccagtgttag tcagtgttct gctggcttag attattacct 120
 ttttctgggt ccttactgtg ttttattctg atgggtccta gaaatccctc tcctgaccac 180
 ttgtcagaat cagaaagtga ggaagaagaa aatattagtt acctaaatga gagtctcgag 240

<210> 2469

<211> 246

<212> DNA

<213> Homo sapiens

<400> 2469

gaattcgcgg ccgcgctcgac ggacataagg ggaacctagg tgaaggatag atgggaatct 60
 tttgcctatt ttctgtaact ttaaaatttt ttcacaataa aatgaagag agtatgtttg 120
 cttagtattg tgtataact gcaacagttt agtattcaag aatatataaa atccccactt 180
 agccaacctt ttcaggatgt gcccgccctg cccaatacac ttttatattc tagccaaaaa 240
 ctcgag 246

<210> 2470

<211> 224

<212> DNA

<213> Homo sapiens

<400> 2470

gaattcgcgg ccgcgctcgac attatcttta atatatttga cattgaacat ttgtttgtta 60
 aaccacaaaa aagttttcaaa caagagaaat ctgttttgac tgttggagg cagagacagc 120
 acaagattag cctgttctgc tgaagtcata gttcaacctt aatgaacgac aaggaataaa 180
 agactgtaca tatgagggtg gtagtattag cgtgcttgct cgag 224

<210> 2471

<211> 257

<212> DNA

<213> Homo sapiens

<400> 2471

gaattcgcgg ccgcgctcgac aaattatttt ttatttcaat cattttaaat acattccttc 60
 tactggcatt cacctgttag attcccgccc cccccccgc cctgtcttt caactaatat 120
 agttcttact taaaagacag gatacattgt tttctcttac ctacttattt tcagagttag 180
 gagtatttgt tagaagtatt cactcatctt taatgaaatt gttttgttca tcagattatt 240
 tcaggagagc ctcgag 257

<210> 2472

<211> 231

<212> DNA

<213> Homo sapiens

<400> 2472

gaattcgcgg ccgcgctcgac gggagtctcc tcattaaaag gaatccagtt atttgaccgt 60
 ataaaattat ttggaatgcc tgctaagcat cagcctgatt tgatataacct ccgttatgtg 120
 ccgctctgga aggtccatat tttcacagtc attcagctta cttgtttggt ctttttatgg 180
 gtgataaaaag tttcagctgc tgcagtgggt tttcccatga tggttctcga g 231

<210> 2473

<211> 179

<212> DNA

<213> Homo sapiens

<400> 2473

gaattcgcgg ccgcgctcgac gtctggggga gcatgattgt tctgggcaca caggccctgg 60
 ttgaagtgtt ccttgtctgc agagtcttgc tgcattgtaac ggaacagaga agccataacct 120
 tgtttctcag atggggtggt accaaagaac tggctgagga tgtgggtggt gacctcgag 179

<210> 2474

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2474

```

gaattcgcgg cgcgctcgac aaaatctgag ggtatgatgt acaactttta cacatgatac 60
atgaacttta acacaattgt gaattagagc ccaacttagt tcaagacaaa atgtatctcg 120
aacacttctt ttcttcttaa aatatcagca ataacttagt atccaaagta ggagattcat 180
catcacctta agacttctta gcagtttttc ttgtgtgaca aaatatttta cacctttatt 240
tgagaacaaa ggaagattat gagagaccac tagaaatgga atttttagcat ttcgaaggaa 300
tttttatatg acgttggtcc tcttggcaat tcagaaagca ctccaggaat ttgtctagtt 360
agtgttttgt atatattaga atctgtgtct atttcctttg taaaaaata cgaagacctc 420
gag                                                                                   423

```

<210> 2475

<211> 226

<212> DNA

<213> Homo sapiens

<400> 2475

```

gaattcgcgg cgcgctcgac ttctagacct gcctcgagcc ctgccctttt caccttatct 60
gctgttatct aaaccacaaa atatttatta agccctgctt ggctaacttc tcccacccca 120
acaaataaac acactctaata caagccaatc tccctattgt tcccttgaac ttgtcgggct 180
tttctttttt atgcttttgt tcatgttttt tctactccca ctcgag                               226

```

<210> 2476

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2476

```

gaattcgcgg cgcgctcgac caaaaataca tcacagcctt ctcaaacagc tcaagcaata 60
tattgtatat tgccatatcg tctggtgaaa gggttaaatt acttcacctc ttgcaacttt 120
agatgcaaat cagtttttca tttctgtaat agaaaattat tcacgtattt ttacatcatt 180
tgttttttcct gaccagtatt taaaacccaa aggatattct gaaaaatggc caacaatttt 240
tttagaagta gcatcccaag cagcgaactc gag                                           273

```

<210> 2477

<211> 245

<212> DNA

<213> Homo sapiens

<400> 2477

```

gaattcgcgg cgcgctcgac agatttcata atatactagc ttctgttgga atgtatcagg 60
gattaggttg tttattttta tttttattta ttttttgggg gttcggagtc tcgttctgtc 120
tcccaggctg gagtgcagtg gtgccatttc ggctctctgc aacctccacc tcccagggtc 180
aagtgattct cctatctcag ctactctgga ggctgagggg gtatggggca ggagaattgc 240
tcgag                                                                                   245

```

<210> 2478

<211> 268

<212> DNA

<213> Homo sapiens

<400> 2478

```

gaattcgcgg cgcgctcgac ttactgcatt gtttgtcact gggaacccaa ggataaaaga 60
gtagcataag ctgctgaatg ttgccatatt aaaggagaga acttggtaac gtgaagtatt 120
tctcattgaa atgcttttcc ttttgtatat agccagtgtt aaatccttaa atgcaatata 180
gcctctgatt attgagcttc ctcttaaaaa gattttttta ttttatgtag ccaacattgc 240

```

agtactgtat gctcaaacac aactcgag

268

<210> 2479

<211> 224

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcgcg cgcgctcgac cctaaaccgt cgatctaatt acagaacatt ttaatcactc 60
ggaaaagaaa tctgtatcca tccattaagc agtcattgcc tgtcccccgt gacccagcc 120
cccggaacc actaatctac tttctgttgc tattgatata cctgttctgg acattttaca 180
taaattggaat tataacaacat atgatgtttt tatgtgtgct cgag 224

<210> 2480

<211> 225

<212> DNA

<213> Homo sapiens

<400> 2480

gaattcgcg cgcgctcgac gaacaagggt tctttgctaa tggagcctat attctgggtg 60
aggattggac acctgaacac acagatgtct gcagatttcc tggccttcac cttgtcctat 120
gtcaaaagact ccattactgc taaagtactg tttatcttaa taatgggtgac ttttgttgtt 180
gttttttttg agtcagggtc tcgctctgtt gccaggagac tcgag 225

<210> 2481

<211> 226

<212> DNA

<213> Homo sapiens

<400> 2481

gaattcgcg cgcgctcgac gggcgcccaa cagcttttat cccattctt agagcatatt 60
ctttattata acgattatcc aacatatttc ttttaattta atacaaaaaa tacatcattt 120
aatttttgtt acatatgaac attcattttt aaatgctcag cctcaagtgc aggcattttt 180
gagtggcctg attacatatt cctccacag caagtccgat ctcgag 226

<210> 2482

<211> 209

<212> DNA

<213> Homo sapiens

<400> 2482

gaattcgcg cgcgctcgac agcaccagtt gattcggtgg ttttgaggaa aatttgggag 60
gcaaataagt tataatataa attgctttat tgttgaactt actactcagt cactgagaat 120
ttctattaat gtccttctct cgtagtccaa atatcaacct ttcccttctt atctatagga 180
ttctattgtt atttgggtgc atactcgag 209

<210> 2483

<211> 283

<212> DNA

<213> Homo sapiens

<400> 2483

gaattcgcg cgcgctcgac cctaaaccgt cgattgaatt cttagcctccc gagtagctgg 60
gattacaggc atgcgccact acgcctgggt agttttgtta tttttagtag agacgggatt 120
tctccgtgtt ggtcaggctg gtctcaaac cctgacttca ggtgatccac ccacctcagc 180
ctcccaaat gctgggatta caggcatgag ccaccttgcc cagccttttt ggaaaaattc 240
taacaatcca ccaaaattta aacttgaccc tgatccactc gag 283

<210> 2484

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2484

```

gaattcgcgg ccgcgtcgac acaattttta aaaaatagtt caatgccag aaaatccgc 60
ccatgctaca caagacgaga ttctctgcat gcacagcgct ggggtgggaga acccagaggc 120
agctgtgagg acagggggcca cggcagccaa tgtggcctcg tgaggagtga ggctgggagc 180
caggggtgggc ctctgagctc ctctcaacc cagaagggtg gagggcctct ccacttgac 240
acgtaccttt cacccaaaaag aaaaagactg gcgaaaacaa cggcccaggt caccggacac 300
gcccgcggtt tggacagccc accttgactg cattgcctca cgctcgacat ttacagcgt 360
gagacttcgc aaagtgagcc aggtctcgag 390

```

<210> 2485

<211> 102

<212> DNA

<213> Homo sapiens

<400> 2485

```

gaattcgcgg ccgcgtcgac cgctcgattga aaaactctag ccaacaagac aactcttctc 60
gggaaagtc cagcttagag gatgaggaga ctatatctcg ag 102

```

<210> 2486

<211> 216

<212> DNA

<213> Homo sapiens

<400> 2486

```

gaattcgcgg ccgcgtcgac aataaaacta agctctgatt ctgaaattgt acaacaaagc 60
atgcaaacat cagatggaat attgaatccc agcagcggag gcacaccac tacttctgtt 120
cctggaagtc cagatggtgt ctttgatcaa acttgcttag attttgaagt tgagagtgt 180
ggtggtatag ccaatagtac aggtttctcc ctgcag 216

```

<210> 2487

<211> 186

<212> DNA

<213> Homo sapiens

<400> 2487

```

gaattcgcgg ccgcgtcgac cagcccatca ttttctaaga aatactacag gatgcttgaa 60
caatcccttg attttcctta taactgcatt atttactag agtttttttc cccagggaa 120
atacccttgc tttccctttt catccatatt ttgatcctgg ataaggtctc tacgtgtgcg 180
ctcgag 186

```

<210> 2488

<211> 230

<212> DNA

<213> Homo sapiens

<400> 2488

```

gaattcgcgg ccgcgtcgac gtaagttttt cacagtgtat taggttagtt ttaaatagca 60
cagggccaaa cggagagttt taagttatcc agtgtgttat tataccactt aattttactg 120
tgtgtaagac ttgactttta acaagtaaag tgagccatca agccttatta aagatcaatt 180
tccacattgc ttgcccatat atgttgatg tattgttcct tgtgctcgag 230

```

<210> 2489

<211> 276

<212> DNA

<213> Homo sapiens

<400> 2489

```

gaattcgcgg cgcgctcgac aacacatttt ctttgacgtt taaacctcat tgaattggat 60
tcctgttact tgcagtcaaa agcatcctga caaatacagc ccccaatggt gcaactgcta 120
catctccttg ctacaagtgg ccacgtcctg ctcaaagccc tgctctgcct cccctgcacc 180
ctttgcctaa cttcaatgcc ctctaggaca tgggccctgc ccacagggtcc tgtcttcctc 240
cctggcttca cttcttgcca tatccctaata ctcgag 276

```

<210> 2490

<211> 123

<212> DNA

<213> Homo sapiens

<400> 2490

```

gaattcgcgg cgcgctcgac gtctgagatg cttttctcca ccttggcatt cctctccctg 60
gtggcaactg agagctctgt agaccaccta catgcttate aaaaacactc cgtcatcctc 123
gag

```

<210> 2491

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2491

```

gaattcgcgg cgcgctcgac gtgggggtgc aaatacttct gaatatttcc agtgtttctt 60
tgtttgttct tacttttctt ttcagacttg ggtgtaactg gatcagattt tctggaattc 120
aagggagaag ccgagatact tccctcacag aaattggtta tatcaatgct tagctttctt 180
gccagttcct catcactttt cagttgttct tccatcgctc ttcgcctttt tctgcctgt 240
cttttttctt cttcttctc ctctgccaac aacctctgta tgtattcttc actggctttg 300
ttttcttctt cctcgctggc ccgtcgctct gccgccacct tgcttatttc ctcttcatat 360
tctcttctca gttccccagg tctcgag 387

```

<210> 2492

<211> 201

<212> DNA

<213> Homo sapiens

<400> 2492

```

gaattcgcgg cgcgctcgac ctgaggtatg aagaattgca aacactttta tctacctctc 60
ctggcttttc tgatcctaata ctgctgcaaa actttgagta aaaccatctc tgtctccaat 120
tccagcagca atcaaagtgt ggccctgata aacagcacca gcctcacctt ggaatttatt 180
aaatatgcaa atgacctcga g 201

```

<210> 2493

<211> 334

<212> DNA

<213> Homo sapiens

<400> 2493

```

gaattcgcgg cgcgctcgac agaagaactt ccttattaac tattacaata ggatcaaaga 60
ttcttgtgtg aaagctgaca aaatgaccag atctcataaa aatggttgccg atgactatat 120
ccacaccgca gcctgcttac atagcctggc tttagaagag cccacagtca tcaaaaagta 180
cctattgaag gttgctgagc tatttgaaaa actaaggaaa gtagagggtc gagtttcac 240
agatgaagat ttgaagctaa cagagctcct ccgatactac atgctcaaca ttgaagctgc 300
taaggatctc ttatacagac gcaccagact cgag 334

```

<210> 2494

<211> 210

<212> DNA

<213> Homo sapiens

<400> 2494

```

gaattcgcgg cgcgctcgac cgagagagaa gaagagaaaa tgaaagcagc tggttttgca 60
gaagtgtgtg tcgcatcgcc cagttggggc tggaccctcc tgtgtccatc cctgttcccc 120
caggggctct atcagcccct gtaccccaca ctgccctctg aagacaacac aggctcctgc 180
ttccacctcg ccccaccgg tgcctctgag                210

```

```

<210> 2495
<211> 280
<212> DNA
<213> Homo sapiens

```

```

<400> 2495
gaattcgcgg cgcgctcgac gccatagata ccatacagta aacatcactc ttttaaaaaa 60
tattttttat ttccggcataa tttcagagtt ttacaaaagt tgcaggaata gtacaaagaa 120
ttctcttcac ttggatacct aaatgttaat attttactac atttgcttta tccttttctt 180
tctctgtaat ttgtatttga accatttgaa agtaagtagc aggcggggcg ccgtgggtgt 240
ggctcacgcc tgtaatccca gcactcaggg cgcgctcgag                280

```

```

<210> 2496
<211> 695
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (338)

```

```

<400> 2496
gaattcgcgg cgcgctcgac gtattttagt cgcagaaggg gacgtaaagt ggaggagagc 60
tgtagcagaa atgagggcggtg tggcatcaca tggctgagtt attccttcct ccgtgagcct 120
ccgtttcctc atctgtgtga tggggatata gtaattctta tatagattga tgaggattaa 180
gtgagatttt gtatattgat agaatttagc atagcactgg ccacagagta gatgtgtaat 240
aagtggtagt tttcttcttt tctgtgattc tcatttttaa gaagaatgac ttacttgatt 300
tttttaaaat aaaaattgta taggtattta tttttagnaa ctcaagccat accaggaaat 360
acaaaaaaa aaatctaata aatacctcca agatcccacc attgagaaat aatcagcgctc 420
agcagtttga tgtccagcaa cccagacatc tctttctgca cgcctataca tgttaaaggc 480
tgattgggca tcagtggata gatctatagg aagaaatgga attatactat aatgctgttt 540
ttaagaaaaa caagatatgc acaatataat tttatttgaa ttttaaccaga aaaaagagac 600
actaaatgaa tctaaaggaa ttattgaaact tgagacattt ttcttttctt ttctcttttt 660
ttgagactga gtctcactct gtcacccaac tcgag                695

```

```

<210> 2497
<211> 213
<212> DNA
<213> Homo sapiens

```

```

<400> 2497
gaattcgcgg cgcgctcgac cctaaaccgt cgattgcatt cttgagatat acctcacttg 60
gttttgctac aggtattttg aagcttttat gaattgcctg ccctttttta aggtgaaatg 120
ttctttgctt cctataatgc tatgttatgg tctactttgc ctgatattaa tgccattgtt 180
tttttaattc atgtgtttga atgggttactc gag                213

```

```

<210> 2498
<211> 221
<212> DNA
<213> Homo sapiens

```

```

<400> 2498
gaattcgcgg cgcgctcgac tgactaatca aactaacctt aaaacaaatg atagccatac 60
acaacactaa ccatacatcat catcacatga ccatgaccat cactatcacc atcctcatca 120
ccatcatcat tatcatttct atcaccccat catcatcacc atcagcatca gcatcatcaa 180

```

caccaatatt ttcacatca ccatcatcac catccctcga g

221

<210> 2499

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2499

gaattcgagg cgcgctcgac cccattctca tcatatttcc ctgggagcca tccacctctt 60
cactgcttat agatcctgct cttatctctg ttccagcact tgtaactgct ccatcacttt 120
caacttcact aataaaagta atagttcctt caactatttc tgagtctcta cttaaagaac 180
catcacattt ttcttcagag cctgcactgg ttacagcatc atccttttcc tctgtcacia 240
cgctatttac attggcttcg attttaactg catgcacagc cagtaggtct gctgctctgt 300
cctcagattc agccacagca cactccccac ttcccccttc cctcgag 347

<210> 2500

<211> 370

<212> DNA

<213> Homo sapiens

<400> 2500

gaattcgagg cgcgctcgac cactgttact gccaccatct ccatttccag gttttttctc 60
tttttctttt tgttggtttc acttcaacat gtttctgtta cacacaagat gtcttctttc 120
ctggggcagc cctctctatc ttccctctg catattgttc ctgaatgact ttttgacgtt 180
ctgtttctgc atattggtgt ccacgtattt gactactctg ttctctggaa tgattcaacc 240
ctatttttat tccaccaatt gtaatgtaca aagtatttca cttgtttgtc ctttatggca 300
acctctacac acttttcttc ataaaaaagg ggtccaagag agcgagcac tcaccacccc 360
acacctcgag 370

<210> 2501

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> linker sequence

<400> 2501

gaattcgagg aaagaggcct a

21

<210> 2502

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> linker sequence

<400> 2502

gaattcgagg ttcattggcct a

21

<210> 2503

<211> 8

<212> DNA

<213> Artificial Sequence

<220>

<223> linker sequence

<220>

<221> unsure
<222> (7)..(8)

<400> 2503
gaattcnn

8

<210> 2504
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<220>
<221> unsure
<222> (1)..(9)

<400> 2504
nnnnnnnnnc tcgag

15

<210> 2505
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<220>
<221> unsure
<222> (1)..(9)

<400> 2505
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15

<210> 2506
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> linker sequence

<400> 2506
acggcctctt tggccctcga gaca

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/24206

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07K 14/435; C12N 15/12

US CL : 530/350; 536/23.5

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 530/350; 536/23.5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EMBL, Genbank, EMBLest, Genbankest, USPAT issued

search terms corresponding to SEQ ID NO: 252, 1538, 1598, 1734, 1881, 2012, 2104, 2114, 2183, 2348

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA743929, NCI-CGAP, 'National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index,' 23 January 1998 positions 19-121 relevant to positions 126-24 of instant SEQ ID NO: 2183.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda MD), Accession Number AF034544, MOEBIUS et al., 'Direct Submission,' 06 march 1998 positions 354-634 relevant to positions 2-282 of instant SEQ ID NO: 2114.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda MD), Accession Number AA298572, ADAMS et al., 'Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence,' 18 April 1997, positions 49-229 relevant to positions 21-201 of instant SEQ ID NO: 2012.	4, 8



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 FEBRUARY 2000

Date of mailing of the international search report

29 FEB 2000

Name and mailing address of the ISA/US
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/24206

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number R24770, HILLIER et al., 'The WashU-Merck EST Project,' 20 April 1995, positions 1-209 relevant to positions 32-240 of instant SEQ ID NO: 1880.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA632004, NCI-CGAP, 'National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index,' 28 October 1997, positions 172-405 relevant to positions 257-24 of instant SEQ ID NO: 1538.	4, 8
X	Database Genbank on STN, National Center for Biotechnology Information (Bethesda, MD), Accession Number AA027135, HILLIER et al., 'WashU-Merck EST Project,' 09 May 1997, positions 1-343 relevant to positions 371-29 of instant SEQ ID NO: 252.	4, 8

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/24206

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-8 SEQ ID NOS: 252, 1538, 1598, 1734, 1880, 2012, 2104, 2114, 2183, and 2348

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/24206

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack Unity of Invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows:

The nucleic acids of SEQ ID NOS: 1-2500 and the corresponding polypeptides encoded by the nucleic acids of SEQ ID NOS: 1-2500.

The claims are deemed to correspond to the species listed above in the following manner:

All claims are drawn to the species indicated above.

The following claims are generic: 1-8

The species listed above do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species is drawn to a different nucleic acid or corresponding encoded polypeptide. There is no disclosed relationship between the sequences of each individual species.

Restriction to a single species has been waived sua sponte and the Applicants are permitted to have ten species searched without payment of additional fees. The Applicant's representative Suzanne Sprunger elected telephonically on 01 February 2000 to have the sequences corresponding to SEQ ID NOS: 252, 1538, 1598, 1734, 1880, 2012, 2104, 2114, 2183, and 2348 searched.